

L Number	Hits	Search Text	DB	Time stamp
1	4965	metathesis	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
2	674788	ruthenium or Ru	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
3	1250	metathesis and (ruthenium or Ru)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
4	4349693	Osmium or Os	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
5	4644815	(ruthenium or Ru) or (Osmium or Os)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
6	37	trisubstituted adj alkene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
7	247	trisubstituted adj olefin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
8	273	(trisubstituted adj alkene) or (trisubstituted adj olefin)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
9	192	cross adj metathesis	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
10	140	(ruthenium or Ru) and (cross adj metathesis)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
11	265460	styrene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
12	49	((ruthenium or Ru) and (cross adj metathesis)) and styrene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
13	116	585/365.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
14	116	585/366.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
15	77	585/364.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
16	194	585/643.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
17	746	560/205.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35

18	156	560/225.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
19	451	564/159.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
20	535	562/598.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
22	2252	585/365.cccls. or 585/366.cccls. or 585/364.cccls. or 585/643.cccls. or 560/205.cccls. or 560/225.cccls. or 564/159.cccls. or 562/598.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
33	0	19746040.URPN.	USPAT	2003/09/30 06:35
21	3	9951344.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
23	3	"9951344"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
24	2	6316380.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
25	2	6316380.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
26	13	((trisubstituted adj alkene) or (trisubstituted adj olefin)) and (metathesis and (ruthenium or Ru))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
27	2	6348551.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
28	2	5936100.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
29	5	5936100.URPN.	USPAT	2003/09/30 06:35
30	1	9320111.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
31	2	19746040.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
32	20	(cross adj metathesis) and (585/365.cccls. or 585/366.cccls. or 585/364.cccls. or 585/643.cccls. or 560/205.cccls. or 560/225.cccls. or 564/159.cccls. or 562/598.cccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
34	3	"19746040"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
35	5	("6500975").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	4965	metathesis	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
2	BRS	L2	67478 8	ruthenium or Ru	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
3	BRS	L3	1250	metathesis and (ruthenium or Ru)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
4	BRS	L4	43496 93	Osmium or Os	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
5	BRS	L5	46448 15	(ruthenium or Ru) or (Osmium or Os)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
6	BRS	L6	37	trisubstituted adj alkene	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
7	BRS	L7	247	trisubstituted adj olefin	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
8	BRS	L8	273	(trisubstituted adj alkene) or (trisubstituted adj olefin)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
9	BRS	L9	192	cross adj metathesis	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
10	BRS	L10	140	(ruthenium or Ru) and (cross adj metathesis)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
11	BRS	L11	26546 0	styrene	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
12	BRS	L12	49	((ruthenium or Ru) and (cross adj metathesis)) and styrene	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
13	BRS	L13	116	585/365.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
14	BRS	L14	116	585/366.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

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15	BRS	L15	77	585/364.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
16	BRS	L16	194	585/643.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
17	BRS	L17	746	560/205.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
18	BRS	L18	156	560/225.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
19	BRS	L19	451	564/159.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
20	BRS	L20	535	562/598.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
21	BRS	L22	2252	585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
22	BRS	L33	0	19746040.URPN.	USPAT	2003/09/30 06:35		

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16	0
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23	BRS	L21	3	9951344.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
24	BRS	L23	3	"9951344"	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
25	BRS	L24	2	6316380.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
26	BRS	L25	2	6316380.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
27	BRS	L26	13	((trisubstituted adj alkene) or (trisubstituted adj olefin)) and (metathesis and (ruthenium or Ru))	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
28	BRS	L27	2	6348551.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
29	BRS	L28	2	5936100.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
30	BRS	L29	5	5936100.URPN.	USPAT	2003/09/30 06:35		

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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
31	BRS	L30	1	9320111.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
32	BRS	L31	2	19746040.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
33	BRS	L32	20	(cross adj metathesis) and (585/365.cccls. or 585/366.cccls. or 585/364.cccls. or 585/643.cccls. or 560/205.cccls. or 560/225.cccls. or 564/159.cccls. or 562/598.cccls.)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
34	BRS	L34	3	"19746040"	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
35	IS&R	L35	5	("6500975").PN.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

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NEWS 3 Feb 24           PCTGEN now available on STN  
NEWS 4 Feb 24           TEMA now available on STN  
NEWS 5 Feb 26           NTIS now allows simultaneous left and right truncation  
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NEWS 9 Mar 24           Additional information for trade-named substances without  
                          structures available in REGISTRY  
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                          present  
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                          WPIDS/WPINDEX/WPIX  
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                          added to PHAR  
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NEWS 19 May 19          Simultaneous left and right truncation added to WSCA  
NEWS 20 May 19          RAPRA enhanced with new search field, simultaneous left and  
                          right truncation  
NEWS 21 Jun 06          Simultaneous left and right truncation added to CBNB  
NEWS 22 Jun 06          PASCAL enhanced with additional data  
NEWS 23 Jun 20          2003 edition of the FSTA Thesaurus is now available  
NEWS 24 Jun 25          HSDB has been reloaded  
NEWS 25 Jul 16          Data from 1960-1976 added to RDISCLOSURE  
NEWS 26 Jul 21          Identification of STN records implemented  
NEWS 27 Jul 21          Polymer class term count added to REGISTRY  
NEWS 28 Jul 22          INPADOC: Basic index (/BI) enhanced; Simultaneous Left and  
                          Right Truncation available  
NEWS 29 AUG 05          New pricing for EUROPATFULL and PCTFULL effective  
                          August 1, 2003  
NEWS 30 AUG 13          Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 31 AUG 15          PATDPAFULL: one FREE connect hour, per account, in  
                          September 2003  
NEWS 32 AUG 15          PCTGEN: one FREE connect hour, per account, in  
                          September 2003  
NEWS 33 AUG 15          RDISCLOSURE: one FREE connect hour, per account, in  
                          September 2003  
NEWS 34 AUG 15          TEMA: one FREE connect hour, per account, in  
                          September 2003  
NEWS 35 AUG 18          Data available for download as a PDF in RDISCLOSURE  
NEWS 36 AUG 18          Simultaneous left and right truncation added to PASCAL  
NEWS 37 AUG 18          FROSTI and KOSMET enhanced with Simultaneous Left and Right  
                          Truncation

NEWS 38 AUG 18 Simultaneous left and right truncation added to ANABSTR

NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
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NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
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STRUCTURE FILE UPDATES: 10 SEP 2003 HIGHEST RN 583020-12-6  
DICTIONARY FILE UPDATES: 10 SEP 2003 HIGHEST RN 583020-12-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e 2-methyl-2-butene/cn

E1	1	2-METHYL-2-BUTENAL/CN
E2	1	2-METHYL-2-BUTENAMIDE/CN
E3	1	--> 2-METHYL-2-BUTENE/CN
E4	1	2-METHYL-2-BUTENE CATION RADICAL/CN
E5	1	2-METHYL-2-BUTENE COMPOUND WITH BROMINE (1:1)/CN
E6	1	2-METHYL-2-BUTENE COMPOUND WITH CHLORINE (1:1)/CN
E7	1	2-METHYL-2-BUTENE DIMER/CN
E8	1	2-METHYL-2-BUTENE OXIDE/CN
E9	1	2-METHYL-2-BUTENE RADICAL CATION/CN

E10 1 2-METHYL-2-BUTENE TRIMER/CN  
E11 1 2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-CIS-2-PENTENE-PIPERYLENE COPOLYMER/CN  
E12 1 2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-PIPERYLENE COPOLYMER/CN

=> e3

L1 1 2-METHYL-2-BUTENE/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 513-35-9 REGISTRY

CN 2-Butene, 2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN .beta.-Isoamylene

CN 1,1,2-Trimethylethylene

CN 2-Methyl-2-butene

CN 3-Methyl-2-butene

CN Amylene

CN NSC 74118

CN Trimethylethene

CN Trimethylethylene

FS 3D CONCORD

MF C5 H10

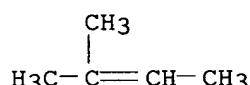
CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, DETHERM\*, DIPPR\*, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4096 REFERENCES IN FILE CA (1937 TO DATE)

31 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

4100 REFERENCES IN FILE CAPLUS (1937 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
6.30	6.51

FULL ESTIMATED COST

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FILE COVERS 1907 - 12 Sep 2003 VOL 139 ISS 11  
FILE LAST UPDATED: 10 Sep 2003 (20030910/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 11  
L2 4102 L1

=> metathesis  
11174 METATHESIS  
157 METATHESES  
L3 11221 METATHESIS  
(METATHESIS OR METATHESES)

=> 12 and 13  
L4 27 L2 AND L3

=> d 127 1-27 ti  
L27 NOT FOUND  
The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (>).

=> d 14 1-27 ti

L4 ANSWER 1 OF 27 CAPIUS COPYRIGHT 2003 ACS on STN  
TI Olefin **metathesis** in a distillation column reactor

L4 ANSWER 2 OF 27 CAPIUS COPYRIGHT 2003 ACS on STN  
TI Preparation of ruthenium alkylidene complexes as catalysts for cross-  
**metathesis** reactions of functionalized and substituted olefins

L4 ANSWER 3 OF 27 CAPIUS COPYRIGHT 2003 ACS on STN  
TI Synthesis of Symmetrical Trisubstituted Olefins by Cross  
**Metathesis**

L4 ANSWER 4 OF 27 CAPIUS COPYRIGHT 2003 ACS on STN  
TI Progress toward the Synthesis of Garsubellin A and Related Phloroglucins:  
The Direct Diastereoselective Synthesis of the Bicyclo[3.3.1]nonane Core

L4 ANSWER 5 OF 27 CAPIUS COPYRIGHT 2003 ACS on STN  
TI A rapid formal synthesis of the macrolide (-)-A26771B

L4 ANSWER 6 OF 27 CAPIUS COPYRIGHT 2003 ACS on STN  
TI Process for the **metathesis** of olefins in the presence of a  
stabilizing agent for the catalyst

L4 ANSWER 7 OF 27 CAPIUS COPYRIGHT 2003 ACS on STN  
TI Procedure for the **metathesis** of olefinic C5 cuts with ethylene

or propylene using a catalyst of rhenium and cesium on .delta.-alumina

L4 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Continuous olefin **metathesis** or disproportionation in multireactor systems

L4 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A Formal Total Synthesis of Roseophilin: Cyclopentannelation Approach to the Macrocyclic Core

L4 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

L4 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Four-step process for the conversion of C4-5 olefinic fractions into ethers and propylene

L4 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of C4-alkene streams by olefin **metathesis**

L4 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A Hydrocarbon Structure Reactivity Study in ADMET Chemistry. 1. 1,1-Disubstituted and Trisubstituted Olefins

L4 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A Simple Allylic Amination Procedure and the **Metathesis** of N-Sulfinylcarbamates

L4 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of a heptamethyltetrahydronaphthalene

L4 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Double-insertion reaction of alkynes with methylzirconocene cation [Cp'2ZrMe]<sup>+</sup>: formation of an unusual distorted .eta.5-pentadienyl ligand

L4 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Study of the gas-phase chemistry of yttrium-methyl cation YCH<sub>3</sub><sup>+</sup>: .sigma.-bond **metathesis** and migratory insertion of C:C bonds into the Y+-methyl bond

L4 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Catalytic poisons in **metathesis** of 1-hexene on an aluminum-rhenium catalyst

L4 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Isobutylbenzene

L4 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and catalytic properties of W(OAr)<sub>2</sub>Cl<sub>2</sub>(CHCMe<sub>3</sub>)(OR<sub>2</sub>) and W(OAr)<sub>2</sub>Cl(CHCMe<sub>3</sub>)(CH<sub>2</sub>CMe<sub>3</sub>)(OR<sub>2</sub>) (Ar = 2,6-disubstituted phenyl; R = Et or CHMe<sub>2</sub>), new unicomponent catalysts for **metathesis** of acyclic and cyclic olefins, with or without functional groups

L4 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Reactions of the metal carbenes FeCH<sub>2</sub><sup>+</sup> and CoCH<sub>2</sub><sup>+</sup> with olefins in the gas phase. Studies involving olefin **metathesis**

L4 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Catalytic homologation of olefins to higher and lower olefins: a **metathesis** related reaction

L4 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Reactions of benzylidene pentacarbonyltungsten with alkenes

L4 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin **metathesis**. IX. The reactivity of various olefins and the reaction mechanism for the **metathesis** over rhenium(VII) oxide-aluminum oxide catalyst

L4 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Interaction of vanadium tetrachloride with .alpha.-olefins. .pi.-Complex formation, with concomitant oligomerization, isomerization and methathesis reactions

L4 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** reactions by iridium catalysts. Synthesis of cis-1,3-dialkenylcyclopentanes

L4 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Catalytic **metathesis** of .alpha.-olefins

=> ruthenium or Ru  
    74638 RUTHENIUM  
    20 RUTHENIUMS  
    74638 RUTHENIUM  
               (RUTHENIUM OR RUTHENIUMS)  
    56862 RU  
    185 RUS  
    57024 RU  
               (RU OR RUS)

L5     91536 RUTHENIUM OR RU

=> osmium or os  
    21346 OSMIUM  
    6 OSMIUMS  
    21348 OSMIUM  
               (OSMIUM OR OSMIUMS)  
    24317 OS  
    70 OSSES  
    285 ORA  
    19 ORAS  
    13 OSAR  
    83 OSSA  
    24775 OS  
               (OS OR OSSES OR ORA OR ORAS OR OSAR OR OSSA)

L6     35651 OSMIUM OR OS

=> 15 or 16  
L7     115781 L5 OR L6

=> 15 and 17  
L8     91536 L5 AND L7

=> 14 and 17  
L9     5 L4 AND L7

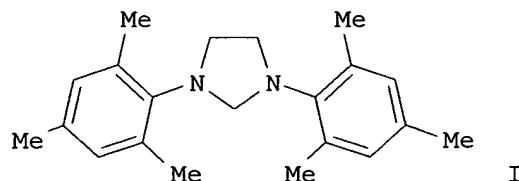
=> d 19 1-5 ti fbib abs

L9 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of **ruthenium** alkylidene complexes as catalysts for cross-**metathesis** reactions of functionalized and substituted olefins

AN 2002:777864 CAPLUS  
 DN 137:295099  
 TI Preparation of **ruthenium** alkylidene complexes as catalysts for cross-**metathesis** reactions of functionalized and substituted olefins  
 IN Grubbs, Robert H.; Chatterjee, Arnab K.; Choi, Tae-Lim; Goldberg, Steven D.; Love, Jennifer A.; Morgan, John P.; Sanders, Daniel P.; Scholl, Matthias; Toste, F. Dean; Trnka, Tina M.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 68 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079126	A1	20021010	WO 2002-US10196	20020401
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214
	US 2003100776	A1	20030529	US 2002-114418	20020401
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214

OS MARPAT 137:295099  
 GI



AB The invention pertains to the use of Group 8 transition metal carbene complexes as catalysts for olefin cross-**metathesis** reactions. In particular, **ruthenium** and **osmium** alkylidene complexes substituted with an N-heterocyclic carbene ligand are used to catalyze cross-**metathesis** reactions to provide a variety of substituted and functionalized olefins, including phosphonate-substituted olefins, directly halogenated olefins, 1,1,2-trisubstituted olefins, and quaternary allylic olefins. The invention further provides a method for

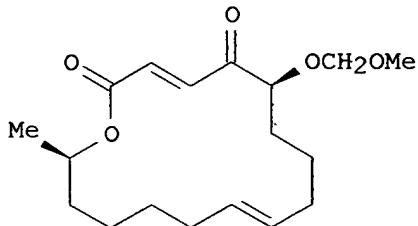
creating functional diversity using the aforementioned complexes to catalyze cross-**metathesis** reactions of a first olefinic reactant, which may or may not be substituted with a functional group, with each of a plurality of different olefinic reactants, which may or may not be substituted with functional groups, to give a plurality of structurally distinct olefinic products. The methodol. of the invention is also useful in facilitating the stereoselective synthesis of 1,2-disubstituted olefins in the cis configuration. In a typical example of the synthesis of substituted allylic olefins, allyldiphenylphosphine oxide and RuCl<sub>2</sub>(:CHPh)(IMesH<sub>2</sub>)(PCy<sub>3</sub>) (synthetic prepn. given) [IMesH = (I)] are added to cis-2-butene-1,4-diacetate to give 90% of the cross product.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis of Symmetrical Trisubstituted Olefins by Cross  
**Metathesis**  
AN 2002:335132 CAPLUS  
DN 137:62904  
TI Synthesis of Symmetrical Trisubstituted Olefins by Cross  
**Metathesis**  
AU Chatterjee, Arnab K.; Sanders, Daniel P.; Grubbs, Robert H.  
CS The Arnold and Mabel Beckman Laboratory of Chemical Synthesis, Division of  
Chemistry and Chemical Engineering, California Institute of Technology,  
Pasadena, CA, 91125, USA  
SO Organic Letters (2002), 4(11), 1939-1942  
CODEN: ORLEF7; ISSN: 1523-7060  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 137:62904  
AB Trisubstituted alkenes have been prepd. via intermol. olefin cross-  
**metathesis** (CM) between .alpha.-olefins and sym. 1,1-disubstituted  
olefins using an imidazolylidene **ruthenium** benzylidene complex.  
Of particular interest is the synthesis of isoprenoid/prenyl groups by a  
simple solvent-free CM reaction with isobutylene. In addn., prenyl groups  
can also be installed by a cross-**metathesis** of 2-methyl-2-butene  
with a variety of .alpha.-olefins at room temp. with low catalyst  
loadings.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A rapid formal synthesis of the macrolide (-)-A26771B  
AN 2001:167330 CAPLUS  
DN 135:5470  
TI A rapid formal synthesis of the macrolide (-)-A26771B  
AU Lee, W.-W.; Shin, H. J.; Chang, S.  
CS Department of Chemistry, Ewha Womans University, Seoul, 120-750, S. Korea  
SO Tetrahedron: Asymmetry (2001), 12(1), 29-31  
CODEN: TASYE3; ISSN: 0957-4166  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
OS CASREACT 135:5470  
GI



I

AB (-)-A26771B, a novel 16-membered macrolide with antibiotic activity, has been formally synthesized. In the synthesis **ruthenium** catalyzed ring-closing olefin **metathesis** (RCM) was used as a key reaction to construct the lactone ring I.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

AN 1999:265988 CAPLUS

DN 130:267876

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

IN Schwab, Peter; Schulz, Michael

PA BASF A.-G., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19746040	A1	19990422	DE 1997-19746040	19971017
	TW 426651	B	20010321	TW 1998-87116887	19981012
	EP 915072	A1	19990512	DE 1997-19746040A	19971017
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			EP 1998-119484	19981015
	CA 2249019	AA	19990417	DE 1997-19746040A	19971017
	JP 11217340	A2	19990810	CA 1998-2249019	19981016
	CN 1218787	A	19990609	DE 1997-19746040A	19971017
				JP 1998-295739	19981016
				DE 1997-19746040A	19971017
				CN 1998-124565	19981017
				DE 1997-19746040A	19971017

AB Propene (I) is prep'd in high yield and selectivity without the need for the use of excess quantities of ethylene in a process comprising: (A) the **metathesis** of mixts. of 1-butene, 2-butene, and isobutene in the presence of a catalyst system contg. .gtoreq.1 of Group VIB and/or Group VIIB (e.g., Re207/Al2O3) and/or Group VIII element compd(s). forming a mixt. of propene, 2-pentenes and 2-methyl-2-butene; (B) sepg. the I from the 2-pentenes and 2-methyl-2-butene mixt.; (C) subjecting the mixt. of 2-pentenes and 2-methyl-2-butene to **metathesis** with ethylene to form a mixt. of I, 1-butene, and isobutene; (D) sepg. the I from the mixt. of 1-butene and isobutene; and recycling the 1-butene and isobutene to step A. Process flow diagrams are presented.

L9 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

TI Catalytic homologation of olefins to higher and lower olefins: a

**metathesis** related reaction  
AN 1985:148672 CAPLUS  
DN 102:148672  
TI Catalytic homologation of olefins to higher and lower olefins: a  
**metathesis** related reaction  
AU Leconte, M.; Theolier, A.; Basset, J. M.  
CS Inst. Rech. Catal., CNRS, Villeurbanne, 69626, Fr.  
SO Journal of Molecular Catalysis (1985), 28(1-3), 217-31  
CODEN: JMCADS; ISSN: 0304-5102  
DT Journal  
LA English  
AB With Fe-SiO<sub>2</sub>, Ru-SiO<sub>2</sub> and Os-SiO<sub>2</sub> ethylene, propene,  
and isobutene disproportionated at 200-300.degree. to yield higher and  
lower olefins and methane. The reaction is catalytic when H<sub>2</sub> is present.  
The mechanism of C-C bond formation in this reaction and in  
Fischer-Tropsch reactions using the above catalysts was the same.

=> carbene  
12280 CARBENE  
7187 CARBENES  
L10 14398 CARBENE  
(CARBENE OR CARBENES)

=> dhis  
L11 18 DHIS

=> d his

(FILE 'HOME' ENTERED AT 10:26:03 ON 12 SEP 2003)

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E 2-METHYL-2-BUTENE/CN  
L1 1 E3  
FILE 'CAPLUS' ENTERED AT 10:27:16 ON 12 SEP 2003  
L2 4102 L1  
L3 11221 METATHESIS  
L4 27 L2 AND L3  
L5 91536 RUTHENIUM OR RU  
L6 35651 OSMIUM OR OS  
L7 115781 L5 OR L6  
L8 91536 L5 AND L7  
L9 5 L4 AND L7  
L10 14398 CARBENE  
L11 18 DHIS

=> l4 and l10  
L12 4 L4 AND L10

=> l12 not 19  
L13 3 L12 NOT L9

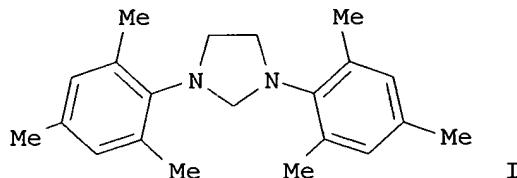
=> d l12 1-4 ti fbib abs

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of ruthenium alkylidene complexes as catalysts for cross-  
**metathesis** reactions of functionalized and substituted olefins  
AN 2002:777864 CAPLUS  
DN 137:295099  
TI Preparation of ruthenium alkylidene complexes as catalysts for cross-  
**metathesis** reactions of functionalized and substituted olefins

IN Grubbs, Robert H.; Chatterjee, Arnab K.; Choi, Tae-Lim; Goldberg, Steven  
 D.; Love, Jennifer A.; Morgan, John P.; Sanders, Daniel P.; Scholl,  
 Matthias; Toste, F. Dean; Trnka, Tina M.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 68 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079126	A1	20021010	WO 2002-US10196	20020401
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214
	US 2003100776	A1	20030529	US 2002-114418	20020401
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214

OS MARPAT 137:295099  
 GI



AB The invention pertains to the use of Group 8 transition metal **carbene** complexes as catalysts for olefin cross-**metathesis** reactions. In particular, ruthenium and osmium alkylidene complexes substituted with an N-heterocyclic **carbene** ligand are used to catalyze cross-**metathesis** reactions to provide a variety of substituted and functionalized olefins, including phosphonate-substituted olefins, directly halogenated olefins, 1,1,2-trisubstituted olefins, and quaternary allylic olefins. The invention further provides a method for creating functional diversity using the aforementioned complexes to catalyze cross-**metathesis** reactions of a first olefinic reactant, which may or may not be substituted with a functional group, with each of a plurality of different olefinic reactants, which may or may not be substituted with functional groups, to give a plurality of structurally distinct olefinic products. The method of the invention is also useful in facilitating the stereoselective synthesis of 1,2-disubstituted olefins

in the cis configuration. In a typical example of the synthesis of substituted allylic olefins, allyldiphenylphosphine oxide and RuCl<sub>2</sub>(:CHPh)(IMesH<sub>2</sub>)(PCy<sub>3</sub>) (synthetic prepn. given) [IMesH = (I)] are added to cis-2-butene-1,4-diacetate to give 90% of the cross product.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and catalytic properties of W(OAr)<sub>2</sub>Cl<sub>2</sub>(CHCMe<sub>3</sub>)(OR<sub>2</sub>) and W(OAr)<sub>2</sub>Cl(CHCMe<sub>3</sub>)(CH<sub>2</sub>CMe<sub>3</sub>)(OR<sub>2</sub>) (Ar = 2,6-disubstituted phenyl; R = Et or CHMe<sub>2</sub>), new unicomponent catalysts for **metathesis** of acyclic and cyclic olefins, with or without functional groups  
AN 1986:460720 CAPLUS  
DN 105:60720  
TI Synthesis and catalytic properties of W(OAr)<sub>2</sub>Cl<sub>2</sub>(CHCMe<sub>3</sub>)(OR<sub>2</sub>) and W(OAr)<sub>2</sub>Cl(CHCMe<sub>3</sub>)(CH<sub>2</sub>CMe<sub>3</sub>)(OR<sub>2</sub>) (Ar = 2,6-disubstituted phenyl; R = Et or CHMe<sub>2</sub>), new unicomponent catalysts for **metathesis** of acyclic and cyclic olefins, with or without functional groups  
AU Quignard, Francoise; Leconte, Michel; Bassat, Jean Marie  
CS Inst. Rech. Catal., Univ. Claude Bernard, Villeurbanne, 69626, Fr.  
SO Journal of the Chemical Society, Chemical Communications (1985), (24), 1816-17  
CODEN: JCCCAT; ISSN: 0022-4936  
DT Journal  
LA English  
OS CASREACT 105:60720  
AB Reaction of (2,6-R<sub>2</sub>C<sub>6</sub>H<sub>3</sub>O)WCl<sub>4</sub> (I; R = Ph, Cl, Br) with 1 equiv (Me<sub>3</sub>CCH<sub>2</sub>)<sub>2</sub>MgL (II; L = dioxane) in Et<sub>2</sub>O gave the corresponding (2,6-R<sub>2</sub>C<sub>6</sub>H<sub>3</sub>O)WCl<sub>2</sub>(CHCMe<sub>3</sub>)(OEt<sub>2</sub>) (III), whereas when 1.5 equiv of II was reacted with I (R = Ph, Cl, Me, F) in Et<sub>2</sub>O, (2,6-R<sub>2</sub>C<sub>6</sub>H<sub>3</sub>O)WCl(CHCMe<sub>3</sub>)(CH<sub>2</sub>CMe<sub>3</sub>)(OR<sub>12</sub>) (IV; R = Ph, Cl, Me, F, R<sub>1</sub> = Et) were obtained. Ether exchange occurred at room temp. when IV (R = Ph, Cl, F, R<sub>1</sub> = Et) was reacted with (Me<sub>2</sub>CH)<sub>2</sub>O giving IV (R = Ph, Cl, F, R<sub>1</sub> = CHMe<sub>2</sub>). These W complexes are the 1st examples of well defined, Lewis acid-free, homogeneous olefin **metathesis** catalysts, for which the activity and stereoselectivity is detd. by the nature of the aryloxide ligand and of the coordinated ether and which show a wide range of potential applications.

L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Reactions of the metal **carbenes** FeCH<sub>2</sub><sup>+</sup> and CoCH<sub>2</sub><sup>+</sup> with olefins in the gas phase. Studies involving olefin **metathesis**  
AN 1985:166909 CAPLUS  
DN 102:166909  
TI Reactions of the metal **carbenes** FeCH<sub>2</sub><sup>+</sup> and CoCH<sub>2</sub><sup>+</sup> with olefins in the gas phase. Studies involving olefin **metathesis**  
AU Jacobson, D. B.; Freiser, B. S.  
CS Dep. Chem., Purdue Univ., West Lafayette, IN, 47907, USA  
SO Journal of the American Chemical Society (1985), 107(9), 2605-12  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English  
AB Reactions of the title **carbenes** with several olefins and alkynes are reported. Ethene reacts with MCH<sub>2</sub><sup>+</sup>, yielding exclusively M<sup>+</sup> formation (C<sub>3</sub>H<sub>6</sub> elimination). Reaction of ethene with MCD<sub>2</sub><sup>+</sup> yields the **metathesis** products FeCH<sub>2</sub><sup>+</sup> and CoCH<sub>2</sub><sup>+</sup> in 20% and 2% yields, resp. Formation of the **metathesis** product MC<sub>2</sub>H<sub>4</sub><sup>+</sup> dominates for propene with no MCH<sub>2</sub><sup>+</sup> produced from MCD<sub>2</sub><sup>+</sup>. Formation of MC<sub>2</sub>H<sub>4</sub><sup>+</sup> is believed to proceed through an ethene-ethylidene intermediate that rearranges to a bis(ethene) complex followed by elimination of ethene. Absence of MCH<sub>2</sub><sup>+</sup> formation from reaction of MCD<sub>2</sub><sup>+</sup> with propene suggests that the alkene-alkylidene conversion is the key step in **metathesis** of

olefins larger than ethene. Several other pathways compete with **metathesis** such as cyclopropanation, olefin homologation, dehydrogenation, and various C-C bond cleavages. Both **carbenes** react with butadiene generating M-c-C<sub>5</sub>H<sub>6</sub><sup>+</sup> and M-c-C<sub>5</sub>H<sub>5</sub><sup>+</sup>. Formation of Fe-c-C<sub>5</sub>H<sub>5</sub><sup>+</sup> implies D.degree. (Fe+ - C<sub>5</sub>H<sub>5</sub>) > 93 kcal/mol. Finally, ethyne and propyne react with MCH<sub>2</sub><sup>+</sup> to yield M<sup>+</sup> as the only product.

L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Reactions of benzylidene pentacarbonyltungsten with alkenes  
AN 1980:75459 CAPLUS  
DN 92:75459  
TI Reactions of benzylidene pentacarbonyltungsten with alkenes  
AU Casey, Charles P.; Polichnowski, Stanley W.; Shusterman, Alan J.; Jones, Carol R.  
CS Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA  
SO Journal of the American Chemical Society (1979), 101(24), 7282-92  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English  
AB The title reactions at -78.degree. gave phenylcyclopropanes and no **metathesis** products. The relative reactivity of the alkenes was CH<sub>2</sub>:CMe<sub>2</sub> > CH<sub>2</sub>:CHMe .mchgt. C<sub>2</sub>H<sub>4</sub>, indicating that the reaction involved electrophilic attack of the **carbene** complex on the alkene. The stereochem. of cyclopropane formation was explained in terms of a transition state which involved formation of a bond from the **carbene** C of PhCHW(CO)<sub>5</sub> to the less substituted end of an alkene and interaction of the pos. polarized, more substituted end with the ipso C of the Ph group.

=> logoff hold			
COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	
FULL ESTIMATED COST	51.60	58.11	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION	
CA SUBSCRIBER PRICE	-5.86	-5.86	

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NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE

NEWS 5 Jul 21 Identification of STN records implemented  
NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in September 2003  
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003  
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003  
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation  
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
NEWS 18 SEP 22 DIPPR file reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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PHONE Direct Dial and Telecommunication Network Access to STN

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DICTIONARY FILE UPDATES: 21 SEP 2003 HIGHEST RN 590345-44

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	
FULL ESTIMATED COST	0.40	0.61	

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 14:08:01 ON 22 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

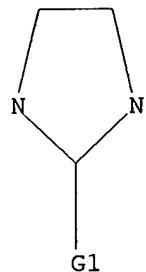
\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'REGISTRY' AT 14:10:53 ON 22 SEP 2003  
FILE 'REGISTRY' ENTERED AT 14:10:53 ON 22 SEP 2003  
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	
FULL ESTIMATED COST	0.40	0.61	

=>  
Uploading 09891144 metal ligand.str

L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search 11 sss sam  
SAMPLE SEARCH INITIATED 14:11:24 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 860 TO ITERATE

100.0% PROCESSED 860 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15441 TO 18959  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> search 11 sss full  
FULL SEARCH INITIATED 14:11:33 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17578 TO ITERATE

100.0% PROCESSED 17578 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.02

L3 0 SEA SSS FUL L1

=>  
Uploading 09891144 metal ligand.str

L4 STRUCTURE uploaded

=> search 11 sss sam  
SAMPLE SEARCH INITIATED 14:12:38 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 860 TO ITERATE

100.0% PROCESSED 860 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15441 TO 18959  
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L1

=> search 11 sss full  
FULL SEARCH INITIATED 14:12:46 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17578 TO ITERATE

100.0% PROCESSED 17578 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L6 0 SEA SSS FUL L1

=> logoff hold  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 296.70 296.91

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 14:12:58 ON 22 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the present  
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NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
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NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
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NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003  
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003  
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation  
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
NEWS 18 SEP 22 DIPPR file reloaded  
NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded  
  
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* \* \* \* \* STN Columbus \* \* \* \* \* \* \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:31:44 ON 27 SEP 2003

=> file reg  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:31:52 ON 27 SEP 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5  
DICTIONARY FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

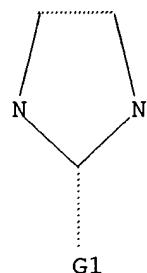
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>  
Uploading 09891144 metal ligand.str

L1 STRUCTURE uploaded

=> d l1  
L1 HAS NO ANSWERS  
L1 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam  
SAMPLE SEARCH INITIATED 08:32:20 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS  
SEARCH TIME: 00.00.01

7 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15422 TO 18938  
PROJECTED ANSWERS: 7 TO 298

L2 7 SEA SSS SAM L1

=> dscan  
0 DSCAN  
L3 0 DSCAN

=> search l1 sss sam  
SAMPLE SEARCH INITIATED 08:32:30 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

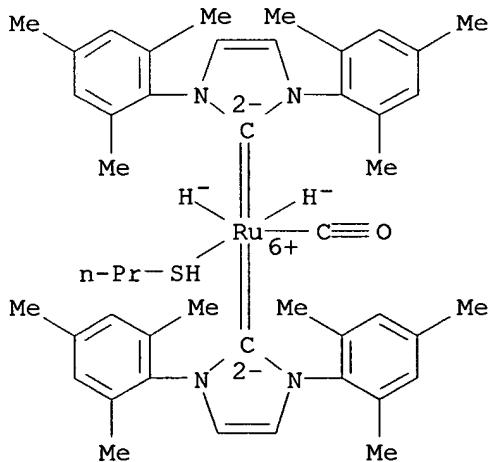
100.0% PROCESSED 859 ITERATIONS 7 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15422 TO 18938  
PROJECTED ANSWERS: 7 TO 298

L4 7 SEA SSS SAM L1

=> d scan

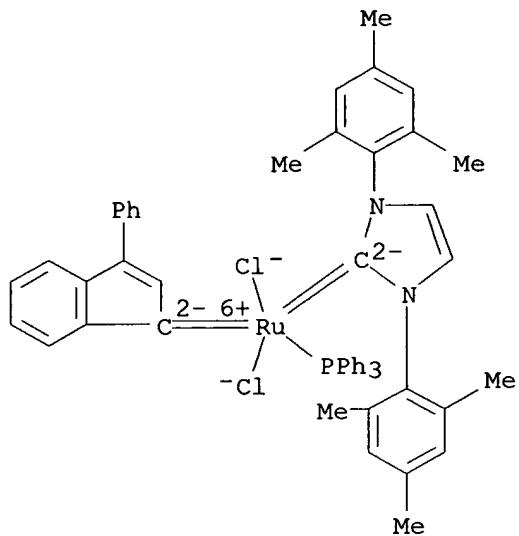
L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium, carbonylbis[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene]dihydro(1-propanethiol)-, (OC-6-23)- (9CI)  
MF C46 H58 N4 O Ru S  
CI CCS



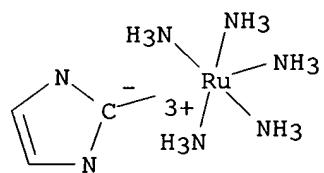
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):7

L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium, dichloro[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene](3-phenyl-1H-inden-1-ylidene)(triphenylphosphine)-, (SP-5-41)- (9CI)

MF C54 H49 Cl2 N2 P Ru  
CI CCS



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,  
(OC-6-21)- (9CI)  
MF C3 H18 N7 Ru . H  
CI CCS

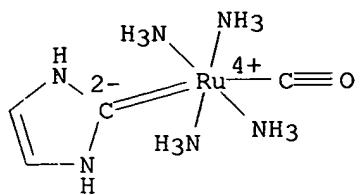


H<sup>+</sup>

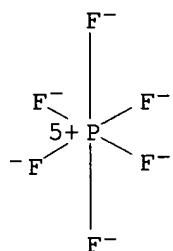
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium(2+), tetraamminecarbonyl(1,3-dihydro-2H-imidazol-2-ylidene)-,  
bis[hexafluorophosphate(1-)] (9CI)  
MF C4 H16 N6 O Ru . 2 F6 P

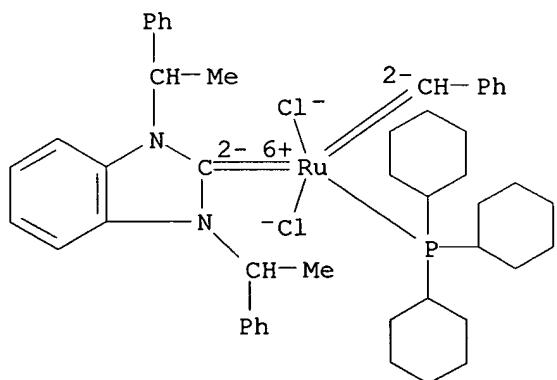
CM 1



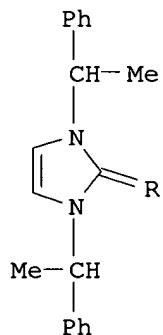
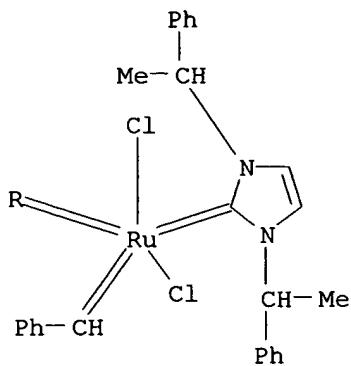
CM 2



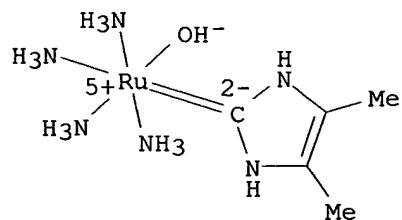
L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium, dichloro[rel-1,3-dihydro-1,3-bis[(1R)-1-phenylethyl]-2H-benzimidazol-2-ylidene](phenylmethylen)(tricyclohexylphosphine)-,  
 (SP-5-41)- (9CI)  
 MF C48 H61 Cl2 N2 P Ru  
 CI CCS



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium, dichlorobis[1,3-dihydro-1,3-bis(1-phenylethyl)-2H-imidazol-2-ylidene](phenylmethylen)-, (SP-5-31)- (9CI)  
 MF C45 H46 Cl2 N4 Ru



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium(2+), tetraammine(1,3-dihydro-4,5-dimethyl-2H-imidazole-2-ylidene)hydroxy-, (OC-6-32)- (9CI)  
 MF C5 H21 N6 O Ru  
 CI CCS



ALL ANSWERS HAVE BEEN SCANNED

=>

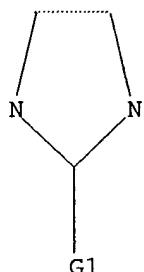
Uploading 09891144 metal ligand.str

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search 15 sss sam

SAMPLE SEARCH INITIATED 08:33:59 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS  
SEARCH TIME: 00.00.01

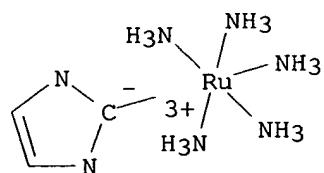
1 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15422 TO 18938  
PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L5

=> d scan

L6 1 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,  
(OC-6-21)- (9CI)  
MF C3 H18 N7 Ru . H  
CI CCS



● H<sup>+</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> search 15 sss full  
FULL SEARCH INITIATED 08:34:31 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17609 TO ITERATE

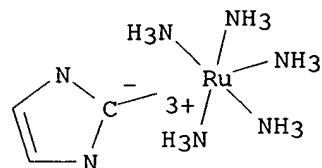
100.0% PROCESSED 17609 ITERATIONS  
SEARCH TIME: 00.00.01

2 ANSWERS

L7 2 SEA SSS FUL L5

=> d scan

L7 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,  
(OC-6-21)- (9CI)  
MF C3 H18 N7 Ru . H  
CI CCS

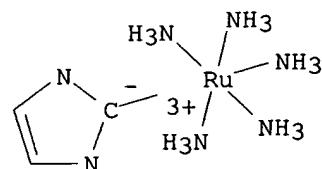


● H<sup>+</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L7 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, (OC-6-21)- (9CI)  
MF C3 H18 N7 Ru  
CI CCS, COM



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> logoff hold\

'HOLD\' IS NOT VALID HERE  
For an explanation, enter "HELP LOGOFF".

=> logoff hold		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		154.37	154.58

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 08:35:13 ON 27 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

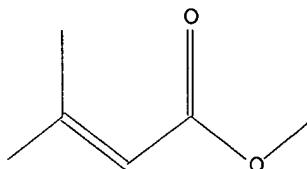
\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'REGISTRY' AT 08:44:18 ON 27 SEP 2003  
FILE 'REGISTRY' ENTERED AT 08:44:18 ON 27 SEP 2003  
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	154.37	154.58

=>  
Uploading 09891144.l trisubstituted olefin.str

L8 STRUCTURE UPLOADED

=> d 18  
L8 HAS NO ANSWERS  
L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 18 exact full  
FULL SEARCH INITIATED 08:45:39 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 808 TO ITERATE

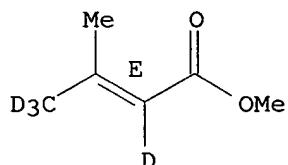
100.0% PROCESSED 808 ITERATIONS 14 ANSWERS  
SEARCH TIME: 00.00.01

L9 14 SEA EXA FUL L8

=> d scan

L9 14 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN 2-Butenoic-2,4,4,4-d<sub>4</sub> acid, 3-methyl-, methyl ester, (E)- (9CI)  
MF C<sub>6</sub> H<sub>6</sub> D<sub>4</sub> O<sub>2</sub>

Double bond geometry as shown.



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus			
COST IN U.S. DOLLARS		SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST		205.32	205.53

FILE 'CAPLUS' ENTERED AT 08:46:16 ON 27 SEP 2003  
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FILE COVERS 1907 - 27 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 19  
L10 334 L9  
  
=> methathesis  
L11 157 METHATHESIS  
  
=> metathathesis  
L12 0 METATHATHESIS  
0 METATHATHESIS  
  
=> metathesis  
11215 METATHESIS  
159 METATHESES  
L13 11263 METATHESIS  
(METATHESIS OR METATHESES)

=> l10 and l13  
L14            2 L10 AND L13

=> d l14 1-2 ti fbib abs

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Heterogeneous **metathesis** of unsaturated esters using a rhenium-based catalyst  
AN 1984:51004 CAPLUS  
DN 100:51004  
TI Heterogeneous **metathesis** of unsaturated esters using a rhenium-based catalyst  
AU Bosma, R. H. A.; Van den Aardweg, G. C. N.; Mol, J. C.  
CS Inst. Chem. Technol., Univ. Amsterdam, Amsterdam, 1018 TV, Neth.  
SO Journal of Organometallic Chemistry (1983), 255(2), 159-71  
CODEN: JORCAI; ISSN: 0022-328X  
DT Journal  
LA English  
OS CASREACT 100:51004  
AB The heterogeneous **metathesis** of unsatd. esters was carried out at room temp., using the catalyst system Re2O7/Al2O3 with an organometallic compd. as cocatalyst. The influence of several parameters on the activity of the catalyst was studied with Me oleate as substrate. The use of a nonpolar solvent and a cocatalyst of general formula SnR4 (R = n-alkyl) provided optimal reaction conditions. The activity of a deactivated catalyst could be completely restored by recalcination in O followed by addn. of cocatalyst. The reactivities of various unsatd. esters as a function of their mol. structure was studied; these esters undergo **metathesis** when the double bond and the carboxylic group are sepd. by at least one methylene group. In general, .alpha.,.beta.-unsatd. esters show a reasonable activity for cometathesis with simple alkenes, such as E-3-hexene.

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cyclopropane-olefin cross **metathesis**  
AN 1977:4491 CAPLUS  
DN 86:4491  
TI Cyclopropane-olefin cross **metathesis**  
AU Gassman, Paul G.; Johnson, Thomas H.  
CS Dep. Chem., Univ. Minnesota, Minneapolis, MN, USA  
SO Journal of the American Chemical Society (1976), 98(19), 6058-9  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English  
AB A divalent C fragment can be transferred from an alkyl-substituted cyclopropane to an .alpha.,.beta.-unsatd. ester or nitrile to yield an alkene and an electron-deficient cyclopropane. This cyclopropane-olefin cross **metathesis** can be accomplished by utilizing the complex formed from PhWC13 and either AlC13 or EtAlC12 (1:1) as catalyst. It is proposed that the catalyst system reacts with the alkyl-substituted cyclopropane to yield a highly nucleophilic metal carbenoid intermediate, which then adds to any Michael acceptor present in soln. Six Michael acceptors were studied. The mechanistic implications of these results are presented.

=> save temp all metathesis/l  
L# LIST L1-L14 HAS BEEN SAVED AS 'METATHESIS/L'

=> d his

(FILE 'HOME' ENTERED AT 08:31:44 ON 27 SEP 2003)

FILE 'REGISTRY' ENTERED AT 08:31:52 ON 27 SEP 2003

L1 STRUCTURE UPLOADED  
L2 7 SEARCH L1 SSS SAM  
L3 0 DSCAN  
L4 7 SEARCH L1 SSS SAM  
L5 STRUCTURE UPLOADED  
L6 1 SEARCH L5 SSS SAM  
L7 2 SEARCH L5 SSS FULL  
L8 STRUCTURE UPLOADED  
L9 14 SEARCH L8 EXACT FULL

FILE 'CAPLUS' ENTERED AT 08:46:16 ON 27 SEP 2003

L10 334 L9  
L11 157 METATHESIS  
L12 0 METATHESIS  
L13 11263 METATHESIS  
L14 2 L10 AND L13  
SAVE TEMP ALL METATHESIS/L

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.75	219.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.30	-1.30

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 08:51:27 ON 27 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPSTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

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NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the present  
NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE  
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NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in

September 2003

NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003

NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003

NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE

NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL

NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation

NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR

NEWS 18 SEP 22 DIPPR file reloaded

NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
0.84	0.84

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Sep 26, 2003 (20030926/UP).

=> DIS\_SAV

NAME	CREATED	NOTES/TITLE
ACETALSRCH/L	TEMP	26 L-NUMBERS
ADAMANSRCH/L	TEMP	10 L-NUMBERS
ADAMANTPREP/A	TEMP	51 ANSWERS IN FILE CAPLUS
ADAMANTSP/A	TEMP	64 ANSWERS IN FILE CAPLUS
ALKYLATIN/L	13 DEC 2001	9 L-NUMBERS
CYCLIZATN/L	TEMP	10 L-NUMBERS
ESTERODOR/L	05 SEP 2002	42 L-NUMBERS
GENRCACETALS/A	TEMP	148 ANSWERS IN FILE CAPLUS
HALOSM/A	TEMP	1890 ANSWERS IN FILE CAPLUS
INDIUMCL3/A	30 MAY 2001	1 ANSWER IN FILE REGISTRY
LWTWENTAUGFOR/A	04 AUG 2001	72 ANSWERS IN FILE CAPLUS

METATHESIS/L	TEMP	14 L-NUMBERS
NEOTAMECRYST/A	24 APR 2001	59 ANSWERS IN FILE CAPLUS
NOSEARCH/L	TEMP	18 L-NUMBERS
NVLARMFULGEN/A	19 APR 2001	196 ANSWERS IN FILE REGISTRY
POHBENZALDEH/A	10 JUL 2001	5519 ANSWERS IN FILE CAPLUS
PROSTACMPD15/A	01 AUG 2001	34 ANSWERS IN FILE CAPLUS
STILLEAPP/L	07 JAN 2002	17 L-NUMBERS
TWOAMINOPOLY/Q	16 APR 2001	UPLOADED STRUCTURE

=> DIS SAVED/S  
NO SAVED SDI REQUESTS

```
=> ACT METATHESIS/L
L1           STR
L2 (        7)SEA FILE=REGISTRY SSS SAM L1
L3 (        0)SEA FILE=REGISTRY ABB=ON   PLU=ON   DSCAN
L4 (        7)SEA FILE=REGISTRY SSS SAM L1
L5           STR
L6 (        1)SEA FILE=REGISTRY SSS SAM L5
L7 (        2)SEA FILE=REGISTRY SSS FUL L5
L8           STR
L9 (        14)SEA FILE=REGISTRY EXA FUL L8
L10 (       334)SEA FILE=CAPLUS ABB=ON   PLU=ON   L9
L11 (       157)SEA FILE=CAPLUS ABB=ON   PLU=ON   METHATHESIS
L12 (       0)SEA FILE=CAPLUS ABB=ON   PLU=ON   METATHESIS
L13 (      11263)SEA FILE=CAPLUS ABB=ON   PLU=ON   METATHESIS
L14 (       2)SEA FILE=CAPLUS ABB=ON   PLU=ON   L10 AND L13
```

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	0.90

FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003  
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FILE COVERS 1907 - 28 Sep 2003 VOL 139 ISS 14  
 FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	1.32

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5  
DICTIONARY FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e 2-2-butene/cn

E1	1	2-199-PROTEIN RAID (RIP-ASSOCIATED ICH-1/CED-3 HOMOLOGOUS PROTEIN WITH A DEATH DOMAIN) (HUMAN CLONE HSDME38XX)/CN
E2	1	2-2 CAST IRON/CN
E3	0 -->	2-2-BUTENE/CN
E4	1	2-201-PEROXIDASE, GLUTATHIONE (HUMAN KIDNEY SELENIUM-DEPENDENT REDUCED)/CN
E5	1	2-203-PROTEIN (MYTILUS EDULIS CLONE 14-1 ADHESIVE PRECURSOR FRAGMENT)/CN
E6	1	2-206-FIBROBLAST GROWTH FACTOR 4 (HUMAN PRECURSOR)/CN
E7	1	2-206-FIBROBLAST GROWTH FACTOR K (HUMAN CLONE KS3 PRECURSOR)/CN
E8	1	2-206-PROTEIN D54 (HUMAN ISOFORM +INS2)/CN
E9	1	2-207-GLIAL-ACTIVATING FACTOR GAF (HUMAN CLONE PGAF1 REDUCED), 2-L-METHIONINE-/CN
E10	1	2-207-HYDRATASE, ALIPHATIC NITRILE (RHODOCOCCUS STRAIN N-774 CLONE PYUK120 .ALPHA.-SUBUNIT REDUCED)/CN
E11	1	2-207-LIPOPROTEIN (BORRELIA GARINII GENE OSPC PRECURSOR)/CN
E12	1	2-207-PROTEIN PELLINO-3 (HUMAN)/CN

=> e 2-methyl-2-butene/cn

E1	1	2-METHYL-2-BUTENAL/CN
E2	1	2-METHYL-2-BUTENAMIDE/CN
E3	1 -->	2-METHYL-2-BUTENE/CN
E4	1	2-METHYL-2-BUTENE CATION RADICAL/CN
E5	1	2-METHYL-2-BUTENE COMPOUND WITH BROMINE (1:1)/CN
E6	1	2-METHYL-2-BUTENE COMPOUND WITH CHLORINE (1:1)/CN
E7	1	2-METHYL-2-BUTENE DIMER/CN
E8	1	2-METHYL-2-BUTENE OXIDE/CN
E9	1	2-METHYL-2-BUTENE RADICAL CATION/CN
E10	1	2-METHYL-2-BUTENE TRIMER/CN
E11	1	2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-CIS-2-PENTENE-PIPERYLENE COPOLYMER/CN
E12	1	2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-PIPERYLENE COPOLYMER/CN

=> e3  
L15 1 2-METHYL-2-BUTENE/CN

=> e 2-methyl-propene/cn

E1 1 2-METHYL-P-QUATERPHENYL/CN  
E2 1 2-METHYL-P-TERPHENYL/CN  
E3 0 --> 2-METHYL-PROPENE/CN  
E4 1 2-METHYL-PROPENE-1,3-BUTADIENE-2-METHYL-1-BUTENE POLYMER/CN  
E5 1 2-METHYL-PYRIDINE OXIDE COMPLEX WITH IODIDE/CN  
E6 1 2-METHYL-S-CYSTEINE METHYL ESTER HYDROCHLORIDE/CN  
E7 1 2-METHYL-S-TRIAZINE-4,6-THIOL/CN  
E8 1 2-METHYL-S-TRIAZOLO(1,5-A)PYRAZINE/CN  
E9 1 2-METHYL-S-TRIAZOLO(1,5-A)PYRIMIDINE/CN  
E10 1 2-METHYL-S-TRIAZOLO(1,5-B)PYRIDAZINE/CN  
E11 1 2-METHYL-SEC-BUTYLBENZENE/CN  
E12 1 2-METHYL-TERT-BUTYLBENZENE/CN

=> e isobutene/cn

E1 1 ISOBUTEN-1-ONE/CN  
E2 1 ISOBUTENAL/CN  
E3 1 --> ISOBUTENE/CN  
E4 1 ISOBUTENE CATION/CN  
E5 1 ISOBUTENE CATION RADICAL/CN  
E6 1 ISOBUTENE DIMER/CN  
E7 1 ISOBUTENE DIMER RADICAL CATION/CN  
E8 1 ISOBUTENE GLYCOL/CN  
E9 1 ISOBUTENE HOMOPOLYMER/CN  
E10 1 ISOBUTENE OXIDE/CN  
E11 1 ISOBUTENE OXIDE POLYMER/CN  
E12 1 ISOBUTENE OZONIDE/CN

=> e3  
L16 1 ISOBUTENE/CN

=> e propene/cn

E1 1 PROPENAL-2-VINYLPYRIDINE COPOLYMER/CN  
E2 1 PROPENAMIDE/CN  
E3 1 --> PROPENE/CN  
E4 1 PROPENE CATION RADICAL/CN  
E5 1 PROPENE COMPOUND WITH CHLORINE (1:1)/CN  
E6 1 PROPENE DICATION/CN  
E7 1 PROPENE HEPTAMER/CN  
E8 1 PROPENE HOMOPOLYMER/CN  
E9 1 PROPENE ISOTACTIC POLYMER/CN  
E10 1 PROPENE MONOOXYGENASE/CN  
E11 1 PROPENE OCTAHYDRATE/CN  
E12 1 PROPENE OXIDE/CN

=> e3  
L17 1 PROPENE/CN

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.86	15.18

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FILE COVERS 1907 - 28 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l15/prep  
4107 L15  
3056971 PREP/RL  
L18 428 L15/PREP  
(L15 (L) PREP/RL)

=> l16  
L19 13922 L16

=> l17  
L20 37158 L17

=> l19 and l20  
L21 3908 L19 AND L20

=> l18 and l21  
L22 60 L18 AND L21

=> carbene  
12311 CARBENE  
7206 CARBENES  
L23 14436 CARBENE  
(CARBENE OR CARBENES)

=> l22 and l23  
L24 0 L22 AND L23

=> metathesis  
11215 METATHESIS  
159 METATHESES  
L25 11263 METATHESIS  
(METATHESIS OR METATHESES)

=> l22 and l25  
L26 3 L22 AND L25

=> d 126 1-3 ti fbib abs

L26 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin **metathesis** in a distillation column reactor  
AN 2003:485742 CAPLUS  
DN 139:53456  
TI Olefin **metathesis** in a distillation column reactor  
IN Podrebarac, Gary G.  
PA Catalytic Distillation Technologies, USA  
SO U.S., 12 pp.  
CODEN: USXXAM

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6583329	B1	20030624	US 1998-35174	19980304
				US 1998-35174	19980304

AB The **metathesis** process is carried out in a reaction distn. column for: (A) for the prodn. of propylene from the **metathesis** of 2-butene and ethylene; (B) for the prodn. of detergent-range olefins from the **metathesis** of C15 and heavier olefins with C9 and lighter olefins; (C) for the prodn. of 2-methyl-2-butene and propylene from the **metathesis** of 2-butene and isobutylene; and (D) for the prodn. of tetramethylethylene from the **metathesis** of isobutylene with itself and/or the reaction of diisobutylene with the ethylene produced to produce neohexene. Process flow diagrams are presented.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

AN 1999:265988 CAPLUS

DN 130:267876

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

IN Schwab, Peter; Schulz, Michael

PA BASF A.-G., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19746040	A1	19990422	DE 1997-19746040	19971017
	TW 426651	B	20010321	TW 1998-87116887	19981012
				DE 1997-19746040A	19971017
	EP 915072	A1	19990512	EP 1998-119484	19981015
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			DE 1997-19746040A	19971017
	CA 2249019	AA	19990417	CA 1998-2249019	19981016
				DE 1997-19746040A	19971017
	JP 11217340	A2	19990810	JP 1998-295739	19981016
				DE 1997-19746040A	19971017
	CN 1218787	A	19990609	CN 1998-124565	19981017
				DE 1997-19746040A	19971017

AB Propene (I) is prep'd in high yield and selectivity without the need for the use of excess quantities of ethylene in a process comprising: (A) the **metathesis** of mixts. of 1-butene, 2-butene, and isobutene in the presence of a catalyst system contg. .gtoreq.1 of Group VIB and/or Group VIIB (e.g., Re207/Al2O3) and/or Group VIII element compd(s). forming a mixt. of propene, 2-pentenes and 2-methyl-2-butene; (B) sepg. the I from the 2-pentenes and 2-methyl-2-butene mixt.; (C) subjecting the mixt. of 2-pentenes and 2-methyl-2-butene to **metathesis** with ethylene to form a mixt. of I, 1-butene, and isobutene; (D) sepg. the I from the mixt. of 1-butene and isobutene; and recycling the 1-butene and isobutene to step A. Process flow diagrams are presented.

L26 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

TI Catalytic homologation of olefins to higher and lower olefins: a

metathesis related reaction  
AN 1985:148672 CAPLUS  
DN 102:148672  
TI Catalytic homologation of olefins to higher and lower olefins: a metathesis related reaction  
AU Leconte, M.; Theolier, A.; Basset, J. M.  
CS Inst. Rech. Catal., CNRS, Villeurbanne, 69626, Fr.  
SO Journal of Molecular Catalysis (1985), 28(1-3), 217-31  
CODEN: JMCADS; ISSN: 0304-5102  
DT Journal  
LA English  
AB With Fe-SiO<sub>2</sub>, Ru-SiO<sub>2</sub> and Os-SiO<sub>2</sub> ethylene, propene, and isobutene disproportionated at 200-300.degree. to yield higher and lower olefins and methane. The reaction is catalytic when H<sub>2</sub> is present. The mechanism of C-C bond formation in this reaction and in Fischer-Tropsch reactions using the above catalysts was the same.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	21.59	36.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 08:03:28 ON 28 SEP 2003

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Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CAPLUS' AT 08:17:32 ON 28 SEP 2003  
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	21.59	36.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

=> acrylonitrile

82693 ACRYLONITRILE

935 ACRYLONITRILES

L27 82949 ACRYLONITRILE  
(ACRYLONITRILE OR ACRYLONITRILES)

=> d his

(FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003  
ACT METATHESIS/L

-----  
L1 STR  
L2 ( 7) SEA FILE=REGISTRY SSS SAM L1  
L3 ( 0) SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN  
L4 ( 7) SEA FILE=REGISTRY SSS SAM L1  
L5 STR  
L6 ( 1) SEA FILE=REGISTRY SSS SAM L5  
L7 ( 2) SEA FILE=REGISTRY SSS FUL L5  
L8 STR  
L9 ( 14) SEA FILE=REGISTRY EXA FUL L8  
L10 ( 334) SEA FILE=CAPLUS ABB=ON PLU=ON L9  
L11 ( 157) SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS  
L12 ( 0) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L13 ( 11263) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L14 ( 2) SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L13  
-----

FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003

E 2-2-BUTENE/CN  
E 2-METHYL-2-BUTENE/CN

L15 1 E3  
E 2-METHYL-PROPENE/CN  
E ISOBUTENE/CN  
L16 1 E3  
E PROPENE/CN  
L17 1 E3

FILE 'CAPLUS' ENTERED AT 07:50:09 ON 28 SEP 2003

L18 428 L15/PREP  
L19 13922 L16  
L20 37158 L17  
L21 3908 L19 AND L20  
L22 60 L18 AND L21  
L23 14436 CARBENE  
L24 0 L22 AND L23  
L25 11263 METATHESIS  
L26 3 L22 AND L25  
L27 82949 ACRYLONITRILE

=> l13 and l27  
11215 METATHESIS  
159 METATHESES  
11263 METATHESIS  
(METATHESIS OR METATHESES)  
L28 54 L13 AND L27

=> crowe  
L29 145 CROWE

=> l28 and l29  
L30 0 L28 AND L29

=> l23 and l28  
L31 9 L23 AND L28

=> d 131 1-9 ti fbib abs

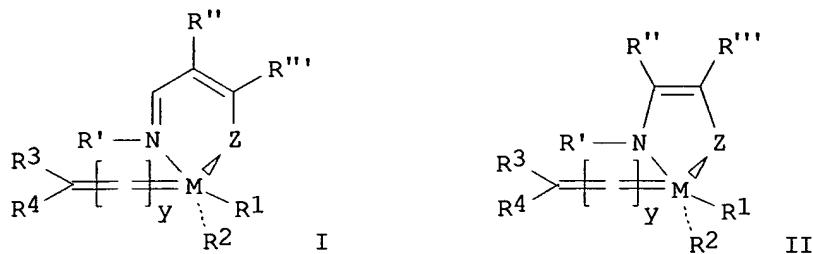
L31 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Metal carbene complexes, methods and intermediates for making  
 them and their use in metathesis reactions  
 AN 2003:568624 CAPLUS  
 DN 139:133973  
 TI Metal carbene complexes, methods and intermediates for making  
 them and their use in metathesis reactions  
 IN Verpoort, Francis Walter Cornelius; De Clercq, Bob  
 PA Universiteit Gent, Belg.  
 SO Eur. Pat. Appl., 44 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1329455	A1	20030723	EP 2002-75250	20020122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	WO 2003062253	A1	20030731	WO 2003-BE8	20030122
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			EP 2002-75250 A	20020122
				US 2002-349956PP	20020201

#### PATENT FAMILY INFORMATION:

FAN 2003:591194

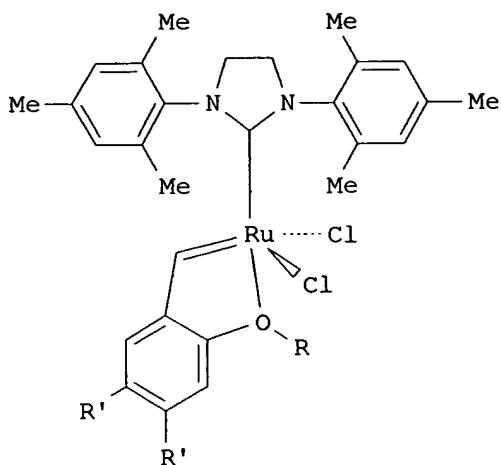
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003062253	A1	20030731	WO 2003-BE8	20030122
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			EP 2002-75250 A	20020122
				US 2002-349956PP	20020201
	EP 1329455	A1	20030723	EP 2002-75250	20020122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
OS	MARPAT	139:133973			
GI					



AB Compds. having one of the general formulas I and II [wherein: M is a metal; Z is selected from the group consisting of O, S, NR''' and PR''''; R', '' and R''' are each a radical independently selected from H, C1-6 alkyl, C3-8 cycloalkyl, aryl and heteroaryl, or R' and R'' together form an aryl or heteroaryl radical, each said radical being optionally substituted; R5 is either as defined for R', R'' and R''' when included in a compd. having the general formula I or, when included in a compd. having the general formula II, is selected from H, C1-6 alkylene and C3-8 cycloalkylene, the said alkylene and cycloalkylene group being optionally substituted; R1 is a constraint steric hindrance group having a pKa of at least about 15; R2 is an anionic ligand; R3 and R4 are each H or a radical selected from, among others, C1-20 alkyl, C1-20 alkenyl; R3 and R4 together may form a fused arom. ring system, and y represents the no. of sp<sub>2</sub> carbon atoms between M and the carbon atom bearing R3 and R4 and is an integer from 0 to 3 inclusive] are useful as catalysts for olefin **metathesis** and atom transfer radical polymn.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L31 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone  
 AN 2003:246866 CAPLUS  
 DN 139:85476  
 TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone  
 AU Grela, Karol; Kim, Mikhail  
 CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01224, Pol.  
 SO European Journal of Organic Chemistry (2003), (6), 963-966  
 CODEN: EJOCFK; ISSN: 1434-193X  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 GI



AB One-step synthesis of ruthenium **carbene** precatalyst (I) ( $R = CH_3$ ,  $R' = OCH_3$ ) from inexpensive .alpha.-asarone is described. This recyclable and easy to obtain complex I was used successfully in various types of **metathesis** reactions (RCM, CM, enyne) as a cheaper and more potent substitute of the Hoveyda-type precatalyst I ( $R = i\text{-}Pr$ ,  $R' = H$ ).

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Dendritic stars by ring-opening-**metathesis** polymerization from ruthenium-**carbene** initiators  
 AN 2003:116375 CAPLUS  
 DN 138:304572  
 TI Dendritic stars by ring-opening-**metathesis** polymerization from ruthenium-**carbene** initiators  
 AU Gatard, Sylvain; Nlate, Sylvain; Cloutet, Eric; Bravic, Georges; Blais, Jean-Claude; Astruc, Didier  
 CS LCOO, UMR CNRS 5802, Universite Bordeaux I, Talence, 33405, Fr.  
 SO Angewandte Chemie, International Edition (2003), 42(4), 452-456  
 CODEN: ACIEF5; ISSN: 1433-7851  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 AB Three generation of dendritic ruthenium-**carbene** complexes contg. chelating diphosphane was synthesized by extension of synthesis route of modeling a dendritic branch, the reversible dimerization of these complexes in concd. solns. Metallocendritic stars were formed by ring-opening -**metathesis** polymn. (ROMP) of norbornene using the complexes as initiator, and the dendritic effects of the initiator on the dimerization and polymn. were also investigated.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Structure and reactivity studies of the first tungsten cyanoalkylidene complex  
 AN 2002:356379 CAPLUS  
 DN 137:201406  
 TI Structure and reactivity studies of the first tungsten cyanoalkylidene complex  
 AU Cameron, Thomas M.; Gamble, A. Scott; Abboud, Khalil A.; Boncella, James

M.  
CS Department of Chemistry and Centre for Catalysis, University of Florida,  
Gainesville, FL, USA  
SO Chemical Communications (Cambridge, United Kingdom) (2002), (10),  
1148-1149  
CODEN: CHCOFS; ISSN: 1359-7345  
PB Royal Society of Chemistry  
DT Journal  
LA English  
OS CASREACT 137:201406  
AB Alkylidene complex  $W(CHCMe_2Ph)(NAr)[OCMe(CF_3)_2]_2$  ( $Ar = 2, 6$   
diisopropylphenyl) (4) reacts with one equiv. of **acrylonitrile**  
in  $CH_2Cl_2$  to afford the tetrmeric, cyanoalkylidene complex  
 $[W(CHCN)(NAr)[OCMe(CF_3)_2]_2]_4$  (5) which reacts with excess MeCN to give  
tetrameric  $[W(N(H)CMeC(CN)CMeN)(NAr)[OCMe(CF_3)_2]_2]_4$  (6). 5 And 6 were  
characterized by x-ray crystallog. 5 Reacts further with PMe<sub>3</sub> in  $CD_2Cl_2$   
to give five-coordinate alkylidene complex,  $W(CHCN)(PMe_3)(NAr)[OCMe(CF_3)_2]$   
2 which reacts with PhCHO to give trans-cinnamonnitrile as an org. product.  
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Substitution and Migratory Insertion Reactions of Square-Planar  
Allenylidene Iridium Complexes  
AN 2001:540828 CAPLUS  
DN 135:273065  
TI Substitution and Migratory Insertion Reactions of Square-Planar  
Allenylidene Iridium Complexes  
AU Ilg, Kerstin; Werner, Helmut  
CS Institut fuer Anorganische Chemie, Universitaet Wuerzburg, Wuerzburg,  
D-97074, Germany  
SO Organometallics (2001), 20(17), 3782-3794  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 135:273065  
AB (allenylidene)iridium(I) complexes  $trans-[IrX\{C:C:C(Ph)R\}(PiPr_3)_2]$  [ $R =$   
 $tBu$ , Ph; X = Br (5), I (6), NCO (7, 8), NCS (9, 10), OH (11, 12), N<sub>3</sub> (13,  
14)] were prepd. from the corresponding chloro derivs.  
 $trans-[IrCl\{C:C:C(Ph)R\}(PiPr_3)_2]$  (3, 4) by salt **metathesis**. An  
x-ray crystal structure anal. of 4 ( $R = Ph$ ) confirmed the almost linear  
arrangement of the Ir-C-C-C chain. The azido compds. 13 ( $R = Ph$ ) and 14  
( $R = tBu$ ) react with CO by migratory insertion of the allenylidene ligand  
into the Ir-N<sub>3</sub> bond. While  $trans-[Ir\{C.tplbond.C-CR(Ph)N_3\}(CO)(PiPr_3)_2]$   
with  $R = tBu$  (16) is thermally stable, the related complex with  $R = Ph$   
(15) rearranges slowly in benzene to the metalated **acrylonitrile**  
deriv.  $trans-[Ir\{C(CN):CPh_2\}(CO)(PiPr_3)_2]$  (17) by elimination of N<sub>2</sub>.  
Treatment of the phenolato compd.  $trans-[Ir(OPh)\{C:C:C(Ph)tBu\}(PiPr_3)_2]$   
(19), obtained from the analogous hydroxo deriv. 12 and phenol, with CO  
also proceeds by migratory insertion and affords the functionalized  
(alkynyl)iridium(I) complex  $trans-[Ir\{C.tplbond.C-$   
 $CtBu(Ph)OPh\}(CO)(PiPr_3)_2$  (20) in excellent yield. The Lewis basicity of  
the hydroxo compds. 11 and 12 was also illustrated by the reactions with  
 $CF_3CO_2H$ ,  $NEt_3$ .cntdot.3HF, and [pyH] $BF_4^-$ , which gave the substitution  
products  $trans-[Ir(\kappa.1-O_2CCF_3)\{C:C:C(Ph)tBu\}(PiPr_3)_2]$  (21),  
 $trans-[IrF\{C:C:C(Ph)R\}(PiPr_3)_2]$  (22), and  $trans-$   
 $[Ir\{C:C:C(Ph)tBu\}(py)(PiPr_3)_2]BF_4^-$  (23), resp. In MeOH soln., both 11. and  
12 react by complete fragmentation of 1 equiv of MeOH to afford the  
octahedral (allenyl)dihydridoiridium(III) complexes  
 $[IrH_2\{CH:C:C(Ph)R\}(CO)(PiPr_3)_2]$  (24, 25). An unprecedented type of  
insertion reaction occurs by treating the hydroxo derivs. 11 and 12 with

an excess of 1-alkynes R'C.tplbond.CH' (R' = Ph, CO<sub>2</sub>Me), which gives the novel five-coordinate Ir(III) compds. [Ir(C.tplbond.CR')<sub>2</sub>{.eta.1-(E)-CH:CR'CH:C:C(Ph)R}(PiPr<sub>3</sub>)<sub>2</sub>] (26-29). From 26, 27 (R' = Ph), and CO, the octahedral 1:1 adducts 30 and 31 are formed. The mol. structures of 22 and 26 were detd. by x-ray crystallog.

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene** ruthenium complex  
AN 2000:872572 CAPLUS  
DN 134:207942  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene** ruthenium complex  
AU Gessler, Simon; Rndl, Stefan; Blechert, Siegfried  
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin,  
D-10623, Germany  
SO Tetrahedron Letters (2000), 41(51), 9973-9976  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB Synthesis and activity in ring closure **metathesis** (RCM) and cross **metathesis** (CM) of the phosphine-free 1,3-dimesityl-2-imidazolidinylidene (IHMes) Ru alkoxybenzylidene complex ([RuCl<sub>2</sub>(IHmes)(2-iPROC<sub>6</sub>H<sub>4</sub>CH)]) are reported. The activities of the above complex and [RuCl<sub>2</sub>(PCy<sub>3</sub>)(CHPh)(IHmes)] were compared.

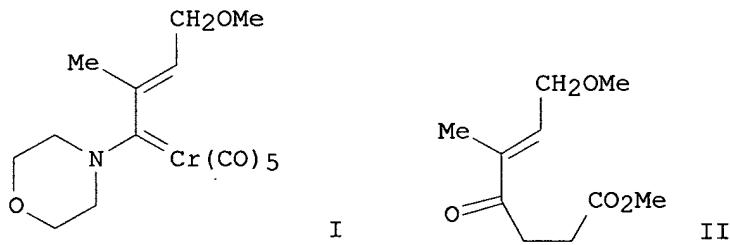
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Azide migration and azide bridging: preparation of metalated **acrylonitriles** and of dinuclear complexes containing an almost linear eleven-membered C<sub>3</sub>RhN<sub>3</sub>RhC<sub>3</sub> chain  
AN 1999:673764 CAPLUS  
DN 132:23070  
TI Azide migration and azide bridging: preparation of metalated **acrylonitriles** and of dinuclear complexes containing an almost linear eleven-membered C<sub>3</sub>RhN<sub>3</sub>RhC<sub>3</sub> chain  
AU Laubender, Matthias; Werner, Helmut  
CS Institut fur Anorganische Chemie der Universitat, Wurzburg, D-97074, Germany  
SO Chemistry--A European Journal (1999), 5(10), 2937-2946  
CODEN: CEUJED; ISSN: 0947-6539  
PB Wiley-VCH Verlag GmbH  
DT Journal  
LA English  
OS CASREACT 132:23070  
AB Isoelectronic square-planar azido- and isocyanatorhodium (I) complexes trans-[RhX(:C:C:CRR')(PiPr<sub>3</sub>)<sub>2</sub>] (X = N<sub>3</sub>: 9-12; X = CNO: 13-16) were prep'd. from the related chloro derivs. trans-[RhCl(:C:C:CRR')(PiPr<sub>3</sub>)<sub>2</sub>] by salt **metathesis**. A single-crystal x-ray diffraction study of 12 (R = Ph, R' = tBu) confirmed an almost linear arrangement of the Rh-C-C-C chain, but a significant bending of the Rh-N-N-N unit. In contrast to the isocyanato complexes 13-16, which are quite inert toward CO, the azido derivs. 9, 11 and 12 react with CO by migratory insertion of the allenylidene ligand into the Rh-N<sub>3</sub> bond. While the product obtained from 12 and CO, in which the N<sub>3</sub> substituent is linked to the .gamma.-C atom of the C<sub>3</sub> chain, is exceedingly stable, the corresponding species with R = R' = aryl are quite labile and rearrange to the metalated **acrylonitrile** compds. trans-[Rh(C(CN):CRR')(CO)(PiPr<sub>3</sub>)<sub>2</sub>] (19, 20)

by elimination of  $\text{H}_2$ . The reactions of 19 and 20 (which was crystallog. characterized) with trifluoroacetic acid gave the corresponding acrylonitriles  $\text{R}'\text{RC:CHCN}$  in quant. yields. Treatment of the mononuclear compds. 9-12 with Meerwein's salt  $[\text{Me}_3\text{O}]^+\text{BF}_4^-$  gave dinuclear  $[(\text{PiPr}_3)_2(\text{R}'\text{RC:C:C:})\text{Rh}_2(\mu-\text{N}_3)]\text{BF}_4^-$  (21-24) contg. an almost linear eleven-membered  $\text{C}_3\text{RhN}_3\text{RhC}_3$  chain. The x-ray crystal structure anal. of 22 ( $\text{R} = \text{Ph}$ ,  $\text{R}' = \text{o-Tol}$ ) revealed that the conformations of the two halves of the cation are quite different and that the angle between the two metal-centered planes is  $56.5(1)$ .degree..

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of  
2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
AN 1995:397673 CAPLUS  
DN 122:187739  
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of  
2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo  
CS Instituto Universitario de Quimica Organometalica Enrique Moles,  
Universidad de Oviedo, Oviedo, 33071, Spain  
SO Organometallics (1995), 14(3), 1429-33  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 122:187739  
GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type vinylaminocarbenes, e.g., I, by the **metathesis** reaction of 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of the vinylaminocarbenes with electron-deficient alkenes to afford, after hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this behavior, a cyclopropanation process was proposed.

L31 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Methylene exchange reactions catalyzed by alkylidene derivatives of  
titanium and phosphorus  
AN 1981:423738 CAPLUS  
DN 95:23738  
TI Methylene exchange reactions catalyzed by alkylidene derivatives of  
titanium and phosphorus  
AU Klabunde, U.; Tebbe, F. N.; Parshall, G. W.; Harlow, R. L.  
CS Cent. Res. Dev. Dep., E. I. du Pont de Nemours and Co., Wilmington, DE,  
19898, USA  
SO Journal of Molecular Catalysis (1980), 8(1-3), 37-51

CODEN: JMCADS; ISSN: 0304-5102

DT Journal

LA English

AB Although olefin **metathesis** is generally catalyzed by compds. of Mo, W, or Re, alkylidene derivs. of Ti and of P also catalyze CH<sub>2</sub> exchange between olefins, the so-called degenerate **metathesis** reaction. In contrast to the metal-based catalysts, the P-based catalysts are effective with olefins in which the C:C bond is conjugated with a functional group such as CN or CO<sub>2</sub>R. These new families of catalysts operate by an alkylidene-metallacycle mechanism like that for conventional olefin **metatheses**. The Ti system is used to study the individual steps in **metatheses** and to detd. the role of the commonly used alkylaluminum cocatalyst. Titanacyclobutenes are isolated from the reactions of acetylenes with methylenetitanium complexes. The structures are detd. crystallog.

=> ruthenium or ru

    74872 RUTHENIUM  
    20 RUTHENIUMS  
    74872 RUTHENIUM  
                (RUTHENIUM OR RUTHENIUMS)

    57014 RU  
    185 RUS  
    57176 RU  
                (RU OR RUS)

L32     91812 RUTHENIUM OR RU

=> osmium or os

    21403 OSMIUM  
    6 OSMIUMS  
    21405 OSMIUM  
                (OSMIUM OR OSMIUMS)  
    24377 OS  
    70 OSES  
    287 ORA  
    20 ORAS  
    13 OSAR  
    83 OSSA  
    24838 OS  
                (OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)

L33     35740 OSMIUM OR OS

=> 132 Or 133

MISSING OPERATOR L32 OR

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> 132 or 133

L34     116120 L32 OR L33

=> d his

(FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003  
ACT METATHESIS/L

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L1               STR  
L2 (           7)SEA FILE=REGISTRY SSS SAM L1  
L3 (           0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN  
L4 (           7)SEA FILE=REGISTRY SSS SAM L1

L5 STR  
L6 ( 1) SEA FILE=REGISTRY SSS SAM L5  
L7 ( 2) SEA FILE=REGISTRY SSS FUL L5  
L8 STR  
L9 ( 14) SEA FILE=REGISTRY EXA FUL L8  
L10 ( 334) SEA FILE=CAPLUS ABB=ON PLU=ON L9  
L11 ( 157) SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS  
L12 ( 0) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L13 ( 11263) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L14 ( 2) SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L13  
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FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003  
E 2-2-BUTENE/CN  
E 2-METHYL-2-BUTENE/CN

L15 1 E3  
E 2-METHYL-PROPENE/CN  
E ISOBUTENE/CN  
L16 1 E3  
E PROPENE/CN  
L17 1 E3

FILE 'CAPLUS' ENTERED AT 07:50:09 ON 28 SEP 2003

L18 428 L15/PREP  
L19 13922 L16  
L20 37158 L17  
L21 3908 L19 AND L20  
L22 60 L18 AND L21  
L23 14436 CARBENE  
L24 0 L22 AND L23  
L25 11263 METATHESIS  
L26 3 L22 AND L25  
L27 82949 ACRYLONITRILE  
L28 54 L13 AND L27  
L29 145 CROWE  
L30 0 L28 AND L29  
L31 9 L23 AND L28  
L32 91812 RUTHENIUM OR RU  
L33 35740 OSMIUM OR OS  
L34 116120 L32 OR L33

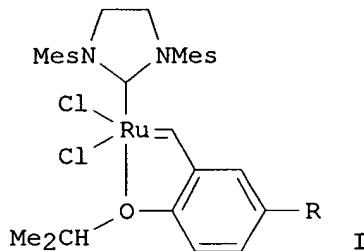
=> 134 and 128  
L35 13 L34 AND L28

=> 135 not 131  
L36 8 L35 NOT L31

=> d 136 1-8 ti fbib abs

L36 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A highly efficient **ruthenium** catalyst for **metathesis**  
reactions  
AN 2002:908270 CAPLUS  
DN 138:254579  
TI A highly efficient **ruthenium** catalyst for **metathesis**  
reactions  
AU Grela, Karol; Harutyunyan, Syuzanna; Michrowska, Anna  
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw,  
01-224, Pol.  
SO Angewandte Chemie, International Edition (2002), 41(21), 4038-4040

PB CODEN: ACIEF5; ISSN: 1433-7851  
DT Wiley-VCH Verlag GmbH & Co. KGaA  
LA Journal  
LA English  
OS CASREACT 138:254579  
GI



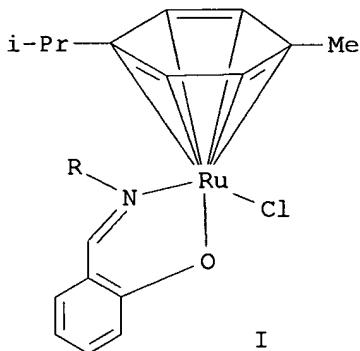
AB The **ruthenium** alkylidene precatalyst I ( $R = NO_2$ , Mes = 2,4,6-trimethylphenyl), bearing an electron-withdrawing substituent, is more reactive than I ( $R = H$ , Br) in the cross **metathesis** (CM) of terminal alkenes, e.g.,  $CH_2:CHCH_2CH_2NTsCH_2CH_2CH:CH_2$ . The cross **metathesis** of terminal alkenes and .alpha.,.beta.-unsatd. compds., e.g.,  $Me_3CSiMe_2O(CH_2)_4CH:CH_2$ , can also be performed at room temp. E.g., cross **metathesis** of  $Me_3CSiMe_2O(CH_2)_4CH:CH_2$  and  $MeCOCH:CH_2$  gave  $Me_3CSiMe_2O(CH_2)_4CH:CHCOMe$  ( $E:Z = 99:1$ ). I ( $R = NO_2$ , Mes = 2,4,6-trimethylphenyl) operates under very mild conditions and can be applied in various types of **metathesis** reactions (RCM, CM, enyne).

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A practical and highly active **ruthenium**-based catalyst that effects the cross **metathesis** of acrylonitrile  
AN 2002:908269 CAPLUS  
DN 138:153869  
TI A practical and highly active **ruthenium**-based catalyst that effects the cross **metathesis** of acrylonitrile  
AU Love, Jennifer A.; Morgan, John P.; Trnka, Tina M.; Grubbs, Robert H.  
CS Arnold and Mabel Beckman Laboratory of Chemical Synthesis Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA  
SO Angewandte Chemie, International Edition (2002), 41(21), 4035-4037  
CODEN: ACIEF5; ISSN: 1433-7851  
PB Wiley-VCH Verlag GmbH & Co. KGaA  
DT Journal  
LA English  
AB A series of **Ru**-based catalysts of general formula  $[(H_2IMes)(Cl)_2Ru(X)(A)]$  ( $A =$ benzylidene, salicylidene;  $X = PR_3$  ( $R = Cy$ , Ph,  $p-CF_3C_6H_4$ ), substituted (3-Br, 4-Ph) pyridines;  $H_2IMes = 1,3\text{-bis}(2,4,6\text{-trimethylphenyl})\text{imidazolidin-2-yl}$ ) were tested on their efficiency in cross **metathesis** of acrylonitrile and allylbenzene. Catalyst  $[(H_2IMes)(3\text{-Br-py})_2(Cl)_2Ru=CHPh]$ , prep'd. from  $[(H_2IMes)(PCy_3)(Cl)_2Ru=CHPh]$  and 3-bromopyridine, exhibited best performance. ROMP of cyclooctadiene was also studied.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

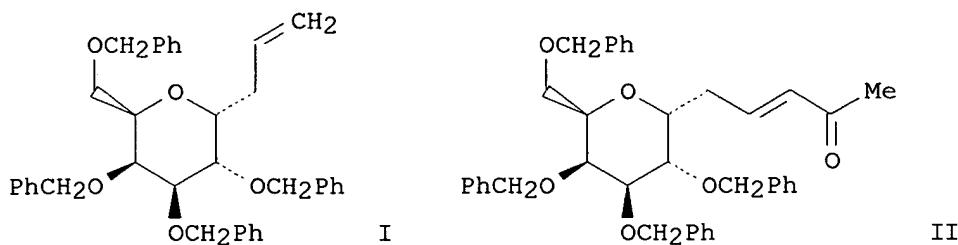
L36 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Ring-closing **metathesis**, Kharasch addition and enol ester synthesis catalysed by a novel class of **ruthenium(II)** complexes  
AN 2001:878871 CAPLUS  
DN 136:294329  
TI Ring-closing **metathesis**, Kharasch addition and enol ester synthesis catalysed by a novel class of **ruthenium(II)** complexes  
AU De Clercq, Bob; Verpoort, Francis  
CS Department of Inorganic and Physical Chemistry, Ghent University, Ghent, 9000, Belg.  
SO Tetrahedron Letters (2001), 42(51), 8959-8963  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
GI



AB **Ruthenium** Schiff base complexes I ( $R = Me, t\text{-}Bu, 4\text{-Br-}2,6\text{-Me}_2C_6H_2$ ) mediated the Kharasch addn. of  $CCl_4$  across olefins with high yields which markedly depended on the catalyst and the substrate used. In addn., ring-closing **metathesis** of some representative diolefins was carried out. The best catalytic system I ( $R = 4\text{-Br-}2,6\text{-Me}_2C_6H_2$ ) is able to form tri- and tetrasubstituted double bond products. Finally, dependent of the catalytic system and the reaction conditions used, these systems can catalyze the stereoselective formation of enol esters or enynes in excellent yields.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Highly efficient and recyclable polymer-bound catalyst for olefin **metathesis** reactions  
AN 2001:775809 CAPLUS  
DN 136:183367  
TI Highly efficient and recyclable polymer-bound catalyst for olefin **metathesis** reactions  
AU Rndl, Stefan; Buschmann, Nicole; Connon, Stephen J.; Blechert, Siegfried  
CS Institut fur Chemie, Technische Universitat Berlin, Berlin, 10623, Germany  
SO Synlett (2001), (10), 1547-1550  
CODEN: SYNLES; ISSN: 0936-5214  
PB Georg Thieme Verlag  
DT Journal



AB Polymer-supported **ruthenium** isopropoxyphenylmethylidene catalysts contg. di(mesityl)imidazolidinylidene ligands have been prepd. as supported catalysts for the cross **metathesis** reactions of alkenes with electron deficient alkenes. While both supported catalysts gave high yields of ring-closing **metathesis** products when treated with diallylamine, the catalyst bound to Wang resin through the isopropoxyphenylmethylidene moiety gave cross-**metathesis** products with electron-deficient alkenes in significantly higher yields than the **ruthenium** catalyst bound to Merrifield resin through the di(mesityl)imidazolidinylidene ligand. The Wang-resin supported isopropoxyphenylmethylideneruthenium catalyst is the first supported catalyst for the cross-**metathesis** of alkenes and electron-deficient alkenes; the catalyst is robust, recyclable, highly active, and is compatible with a wide variety of functional groups. The alkenes produced by cross-**metathesis** reactions in the presence of the supported **ruthenium** catalysts have (E)-stereo with the exception of those formed by cross-**metathesis** reactions with **acrylonitrile** (3:1 Z:E) and acrolein (nonstereoselective). E.g., the Wang-resin supported isopropoxyphenylmethylideneruthenium catalyst was added to a soln. of the perbenzylated D-glycero-L-galactotriideoxynonenitol I and Me vinyl ketone in methylene chloride; the mixt. was stirred for 4-43 h to give the oxopentenyl sugar II in 98% yield.

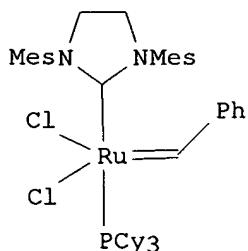
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cross-**metathesis** reaction. Generation of highly functionalized olefins from unsaturated alcohols  
AN 2001:746735 CAPLUS  
DN 136:183531  
TI Cross-**metathesis** reaction. Generation of highly functionalized olefins from unsaturated alcohols  
AU Cossy, J.; BouzBouz, S.; Hoveyda, A. H.  
CS Laboratoire de Chimie Organique, CNRS, Paris, 75231, Fr.  
SO Journal of Organometallic Chemistry (2001), 634(2), 216-221  
CODEN: JORCAI; ISSN: 0022-328X  
PB Elsevier Science S.A.  
DT Journal  
LA English  
AB A cross-**metathesis** reaction was achieved between acid- and base-sensitive functionalized olefins and electron-deficient olefins or allylsilane by using a recyclable **ruthenium** catalyst at room temp. The cross-**metathesis** products are isolated in moderate to good yield. Ratios of E and Z cross-**metathesis** products depend

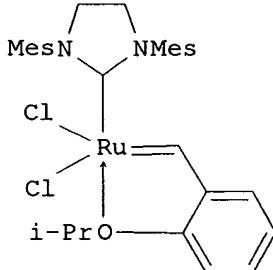
upon substituents on the electron-deficient coupling partner.

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Highly selective cross **metathesis** with **acrylonitrile**  
using a phosphine free **Ru**-complex  
AN 2001:186459 CAPLUS  
DN 135:5692  
TI Highly selective cross **metathesis** with **acrylonitrile**  
using a phosphine free **Ru**-complex  
AU Rndl, Stefan; Gessler, Simon; Wakamatsu, Hideaki; Blechert, Siegfried  
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin,  
10623, Germany  
SO Synlett (2001), (3), 430-432  
CODEN: SYNLES; ISSN: 0936-5214  
PB Georg Thieme Verlag  
DT Journal  
LA English  
OS CASREACT 135:5692  
GI



I



II

AB The exchange of the PCy3 ligand in complex I by an o-isopropylphenyl ether ligand leads to the extremely stable and highly selective initiator II for cross **metathesis** reactions. For the 1st time, **Ru**-catalyzed cross coupling with **acrylonitrile** can be performed in good yields.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Development of hydrogenated ring-opening **metathesis** polymers  
AN 2000:882375 CAPLUS  
DN 134:178919  
TI Development of hydrogenated ring-opening **metathesis** polymers  
AU Otsuki, Toshihiro; Goto, Kohei; Komiya, Zen  
CS Tsukuba Research Laboratories, JSR Corporation, Chiba, 299-0108, Japan  
SO Journal of Polymer Science, Part A: Polymer Chemistry (2000), 38(Suppl.),  
4661-4668  
CODEN: JPACEC; ISSN: 0887-624X  
PB John Wiley & Sons, Inc.  
DT Journal  
LA English  
AB New hydrogenated ring-opening **metathesis** polymers with excellent thermal and optical properties were developed. These polymers were prep'd.

by the ring-opening **metathesis** polymn. of ester-substituted tetracyclododecene monomers followed by the hydrogenation of the main-chain double bond. The degree of hydrogenation was an important factor for the thermal stability of the polymers, and as complete hydrogenation as possible was necessary to obtain a thermally stable polymer. The completely hydrogenated ring-opening polymer derived from 8-methyl-8-methoxycarbonyl-substituted monomer has a glass-transition temp. of 171.degree. and a 5% wt.-loss temp. of 446.degree.. This polymer has excellent thermal and optical properties because of its bulky and unsym. polycyclic structure in the main chain and is an alternative to glass or other transparent polymers such as poly(Me methacrylate) and polycarbonate resin. This polymer has also been used in a wide variety of applications, such as optical lenses, optical disks, optical films, and optical fiber.

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Hydrogenation of ring-opening **metathesis** polymer with  
**ruthenium** catalysts  
 AN 1998:687657 CAPLUS  
 DN 130:4161  
 TI Hydrogenation of ring-opening **metathesis** polymer with  
**ruthenium** catalysts  
 AU Yoshida, Yoshinori; Yoshinari, Masashi; Iio, Akira; Komiya, Zen  
 CS Tsukuba Research Laboratory, JSR Corporation, Tsukuba, 305-0841, Japan  
 SO Polymer Journal (Tokyo) (1998), 30(10), 819-823  
 CODEN: POLJB8; ISSN: 0032-3896  
 PB Society of Polymer Science, Japan  
 DT Journal  
 LA English  
 AB A ring-opening **metathesis** polymer (ROMP) of 8-methyl-8-methoxycarbonyltetracyclo[4.4.0.12,5.17,10]dodec-3-ene (I) was hydrogenated with homogeneous catalysts. Monohydrido or dihydrido **ruthenium**(II) complexes achieved high hydrogenation degree which gave thermally stable satd. ROMP of I. The kinetics of hydrogenation reactions in the presence of carbonylchlorohydridotris(triphenylphosphine) **ruthenium**, RuHCl(CO)(Ph<sub>3</sub>)<sub>3</sub>, were studied in detail and found to follow first-order kinetics to the concn. of double bonds. Apparent activation energy for the overall hydrogenation reaction detd. in the temp. range of 155-180.degree.C was smaller than that obsd. for the hydrogenation of acrylonitrile-butadiene copolymer by rhodium catalyst. The stirring rate did not affect hydrogenation reaction rate, although slower stirring lead to lower conversion at the very beginning of the reaction, indicating diffusion of hydrogen into the reaction media can be neglected if stirring is efficient. The concn. of RuHCl(CO)(Ph<sub>3</sub>)<sub>3</sub> also affected the reaction rate. The reaction rate leveled off at around 3 .times. 10<sup>-2</sup> mM reaching more than 4300 of turnover no.. Applying 100 kg cm<sup>-2</sup> of hydrogen at 160.degree.C in m-xylene, high hydrogenation degrees were achieved at **ruthenium** concn. as low as 20 ppm to the polymer.

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold

COST IN U.S. DOLLARS

FULL ESTIMATED COST

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PASSWORD:

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FILE 'CAPLUS' ENTERED AT 08:35:14 ON 28 SEP 2003  
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.02	-13.02

=> save temp all metathesis/l

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definition. Enter "N" if the current saved definition must be  
preserved. You may then reenter the SAVE command with a different  
saved name. Enter "DISPLAY SAVED" at an arrow prompt (=>) to see a  
list of your currently defined saved names.

REPLACE OLD DEFINITION? Y/(N):y

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'HOLED' IS NOT VALID HERE

For an explanation, enter "HELP LOGOFF".

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	93.24	108.42
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.02	-13.02

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NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE  
NEWS 5 Jul 21 Identification of STN records implemented  
NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in September 2003  
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003  
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003  
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation  
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
NEWS 18 SEP 22 DIPPR file reloaded  
NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded  
NEWS 20 SEP 29 DISSABS now available on STN  
  
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DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

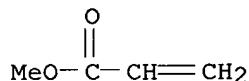
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=> e methyl acrlate/cn
E1      1      METHYL ACONATE/CN
E2      1      METHYL ACRIDINE-2-CARBOXYLATE/CN
E3      0 --> METHYL ACRLATE/CN
E4      1      METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER/CN
E5      1      METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN
E6      1      METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP
          OLYMER/CN
E7      1      METHYL ACRYLATE/CN
E8      1      METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E9      1      METHYL ACRYLATE DIANION/CN
E10     1      METHYL ACRYLATE DIMER/CN
E11     1      METHYL ACRYLATE HOMOPOLYMER/CN
E12     1      METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN

=> e methyl acrylate/cn
E1      1      METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN
E2      1      METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP
          OLYMER/CN
E3      1 --> METHYL ACRYLATE/CN
E4      1      METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E5      1      METHYL ACRYLATE DIANION/CN
E6      1      METHYL ACRYLATE DIMER/CN
E7      1      METHYL ACRYLATE HOMOPOLYMER/CN
E8      1      METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN
E9      1      METHYL ACRYLATE HOMOPOLYMER DODECYL ESTER/CN
E10     1      METHYL ACRYLATE HOMOPOLYMER EICOSYL ESTER/CN
E11     1      METHYL ACRYLATE HOMOPOLYMER ESTER WITH 1-(2-HYDROXYETHYL) PY
          RROLIDINE/CN
E12     1      METHYL ACRYLATE HOMOPOLYMER ESTER WITH 2-(2-HYDROXYETHYL) PY
          RIDINE/CN

=> e3
L1      1 "METHYL ACRYLATE"/CN

=> d 11
```

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 96-33-3 REGISTRY  
CN 2-Propenoic acid, methyl ester (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Acrylic acid methyl ester (6CI, 8CI)  
OTHER NAMES:  
CN 2-Propenoic acid methyl ester  
CN Methoxycarbonylethylene  
CN **Methyl acrylate**  
CN Methyl acrylic ester  
CN Methyl prop-2-enoate  
CN Methyl propenoate  
CN NSC 24146  
FS 3D CONCORD  
DR 102256-29-1  
MF C4 H6 O2  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*,  
EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*,  
HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,  
PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA,  
ULIDAT, USPAT2, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



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11577 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
313 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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=> l1/rct  
11580 L1  
2558019 RCT/RL  
L2 7844 L1/RCT  
(L1 (L) RCT/RL)

=> metathesis  
11216 METATHESIS  
159 METATHESES  
L3 11264 METATHESIS  
(METATHESIS OR METATHESES)

=> l2 and l3  
L4 67 L2 AND L3

=> ruthenium and ru  
74873 RUTHENIUM  
20 RUTHENIUMS  
74873 RUTHENIUM  
(RUTHENIUM OR RUTHENIUMS)  
57016 RU  
185 RUS  
57178 RU  
(RU OR RUS)  
L5 40237 RUTHENIUM AND RU

=> osmium or os  
21403 OSMIUM  
6 OSMIUMS  
21405 OSMIUM  
(OSMIUM OR OSMIUMS)  
24377 OS  
70 OSES  
287 ORA  
20 ORAS  
13 OSAR  
83 OSSA  
24838 OS  
(OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)  
L6 35740 OSMIUM OR OS

=> l4 or l5  
L7 40296 L4 OR L5

=> l4 and l7  
L8 67 L4 AND L7

=> save temp 18 acrylmetath/a  
ANSWER SET L8 HAS BEEN SAVED AS 'ACRYLMETATH/A'

=> d 18 57-67 ti

- L8 ANSWER 57 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Manganese Fischer carbene chemistry: reactions of Cp'(CO)2Mn:C(OMe/OLi)R with enynes, 1-hexyne, and acrylates
- L8 ANSWER 58 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Enantioselective catalysis. VII. Complexes from [P(R,S),3R,4R,P'(R,S)]-3,4-bis(phenylphosphino)pyrrolidine. Preparation of optically pure 1,2-bisphosphine ligands with four stereo centers containing additional functional groups
- L8 ANSWER 59 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Syntheses, reactions, and molecular structures of trans-hydrido(phenylamido)bis(triethylphosphine)platinum(II) and trans-hydridophenoxobis(triethylphosphine)platinum(II)
- L8 ANSWER 60 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Moldable **metathesis**-prepd. crosslinked halogen-containing copolymers
- L8 ANSWER 61 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Impact-resistant polyamide compositions
- L8 ANSWER 62 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Impact-resistant polyamide compositions
- L8 ANSWER 63 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Carbon-13 kinetic isotopic effect of the polymerization of monomers with multiple bonds
- L8 ANSWER 64 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Delayed gelation in the polymerization of cycloolefins
- L8 ANSWER 65 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Copolymers of norbornene-type cycloolefins
- L8 ANSWER 66 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters
- L8 ANSWER 67 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of low-molecular-weight unsaturated acid esters

=> d 18 66,67 ti fbib abs

- L8 ANSWER 66 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters  
AN 1981:155949 CAPLUS  
DN 94:155949  
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters  
AU Otton, J.; Colleuille, Y.; Varagnat, J.  
CS Cent. Rech. Carrières, Rhône-Poulenc, Saint Fons, 69190, Fr.  
SO Journal of Molecular Catalysis (1980), 8(1-3), 313-24  
CODEN: JMCADS; ISSN: 0304-5102  
DT Journal  
LA English  
AB The factors (nature of the functional group, distance between the double bond and the functional group) governing the **metathesis** of

functionally substituted olefins were studied with the catalyst WC<sub>16</sub>/Me<sub>4</sub>Sn. A new route to long-chain linear mono- and diesters was thus achieved through cross-**metathesis** between 2 easily available compds. (e.g., cyclooctene and Et 3-pentenoate). Arguments are presented concerning the initiation, propagation, and termination steps.

L8 ANSWER 67 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of low-molecular-weight unsaturated acid esters  
AN 1978:61950 CAPLUS  
DN 88:61950  
TI **Metathesis** of low-molecular-weight unsaturated acid esters  
AU Verkuijlen, E.; Dirks, R. J.; Boelhouwer, C.  
CS Inst. Chem. Technol., Univ. Amsterdam, Amsterdam, Neth.  
SO Recueil des Travaux Chimiques des Pays-Bas (1977), 96(11), 86-90  
CODEN: RTCPA3; ISSN: 0034-186X  
DT Journal  
LA English  
AB Unsatd. esters RCH:CR<sub>1</sub>(CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>Me (I; R, R<sub>1</sub>, n = octyl, H, 7; H, H, 0-2; Me, H, 1; Et, H, 0; Me, H or Me, 0; H, Me, 0) underwent both homometathesis and cometathesis with sym. alkenes in the presence of WC<sub>16</sub>-SnMe<sub>4</sub> catalysts when n >= 1. CH<sub>2</sub>:CMeCO<sub>2</sub>Me showed low reactivity toward homometathesis but considerable activity toward cometathesis with 3-hexene; this is attributed to a preference for head-to-tail alignment in homometathesis.

=> d 18 46-56 ti

L8 ANSWER 46 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A direct, highly convergent route to .alpha.-methylene-.gamma.-lactones fused to medium and large rings  
  
L8 ANSWER 47 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Carbynehydridoruthenium complexes as catalysts for the selective, ring-opening **metathesis** of cyclopentene with methyl acrylate  
  
L8 ANSWER 48 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Arenediazonium tetrachlorocuprates(II). Modification of the Meerwein and Sandmeyer reactions  
  
L8 ANSWER 49 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and characterization of d<sub>2</sub> imido complexes of molybdenum. Crystal structure of [MoCl<sub>2</sub>{N(mes)}(PhC.tplbond.CPh)(PMe<sub>3</sub>)<sub>2</sub>].cntdot.0.5PhC.tplbond.CPh (mes = 2,4,6-trimethylphenyl)  
  
L8 ANSWER 50 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Divalent Palladium and Platinum Complexes Containing Rigid Bidentate Nitrogen Ligands and Electrochemistry of the Palladium Complexes  
  
L8 ANSWER 51 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Difunctional telechelic linear non-crosslinked polyolefins  
  
L8 ANSWER 52 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of linear monofunctional and telechelic difunctional polymers by olefin **metathesis** and ring-opening polymerization of cycloolefin  
  
L8 ANSWER 53 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin **metathesis** in preparation of linear monofunctional and telechelic difunctional polymers  
  
L8 ANSWER 54 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reaction of the Coordinatively Unsaturated Methylen Complex  
Ir:CH<sub>2</sub>[N(SiMe<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>2</sub>] with Olefins: Stereoselective Formation of Allyl Hydride Derivatives

L8 ANSWER 55 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

L8 ANSWER 56 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reactions of coordinated ligands. XVIII. Template syntheses and periphery reactions of macrocyclic multiporphosphine ligands with functional groups

=> d 18 55 ti fbib abs

L8 ANSWER 55 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

AN 1995:397673 CAPLUS

DN 122:187739

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo

CS Instituto Universitario de Quimica Organometalica Enrique Moles, Universidad de Oviedo, Oviedo, 33071, Spain

SO Organometallics (1995), 14(3), 1429-33

CODEN: ORGND7; ISSN: 0276-7333

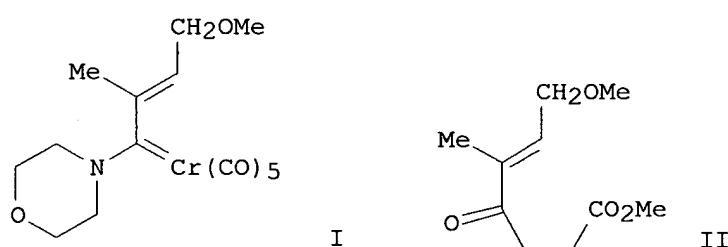
PB American Chemical Society

DT Journal

LA English

OS CASREACT 122:187739

GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type vinylaminocarbenes, e.g., I, by the **metathesis** reaction of 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of the vinylaminocarbenes with electron-deficient alkenes to afford, after hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this behavior, a cyclopropanation process was proposed.

=> d 18 35-45 ti

L8 ANSWER 35 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole carbene **ruthenium** complex

- L8 ANSWER 36 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI N-tri or di-alkylsilyl(perfluoroalkanesulfonyl)imide derivatives, preparation and use as Lewis acid catalysts
- L8 ANSWER 37 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI In Situ Preparation of a Highly Active N-Heterocyclic Carbene-Coordinated Olefin **Metathesis** Catalyst
- L8 ANSWER 38 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes: Potential Catalysts for Ring-Opening **Metathesis**
- L8 ANSWER 39 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A series of ruthenium(II) ester-carbene complexes as olefin **metathesis** initiators: **metathesis** of acrylates
- L8 ANSWER 40 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis of Functionalized Olefins by Cross and Ring-Closing **Metatheses**
- L8 ANSWER 41 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Ferrocene-based phosphonite-phosphine ligands, Pd and Rh complexes
- L8 ANSWER 42 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Application of Olefin Cross-**Metathesis** to Organometallics. Synthesis of Unsaturated Ferrocenyl Alcohols and Ketones
- L8 ANSWER 43 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes
- L8 ANSWER 44 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cationic ruthenium complexes, their production and their use
- L8 ANSWER 45 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cytotoxic Alkaloids Motuporamines A-C: Synthesis and Structural Verification

=> d 18 39,40 ti fbib abs

- L8 ANSWER 39 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A series of ruthenium(II) ester-carbene complexes as olefin **metathesis** initiators: **metathesis** of acrylates  
AN 2000:443431 CAPLUS  
DN 133:207970  
TI A series of ruthenium(II) ester-carbene complexes as olefin **metathesis** initiators: **metathesis** of acrylates  
AU Ulman, M.; Belderrain, T. R.; Grubbs, R. H.  
CS Division of Chemistry and Chemical Engineering, The Arnold and Mabel Beckman Laboratory of Chemical Synthesis, California Institute of Technology, Pasadena, CA, 91125, USA  
SO Tetrahedron Letters (2000), 41(24), 4689-4693  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB A series of ester-carbene complexes, Cl<sub>2</sub>(Cy<sub>3</sub>P)<sub>2</sub>Ru:CHZ (Z = CO<sub>2</sub>R, R = Me, p-tolyl, t-Bu, iPr, cyclohexyl, 1-adamantyl, Ph), were synthesized. These complexes were highly active for the **metathesis** of olefinic substrates, including acrylates and trisubstituted olefins. In addn., the ester-carbene moiety is thermodynamically high in energy. As a result, these complexes react to ring-open cyclohexene by **metathesis** to

alleviate the thermodyn. strain of the ester-carbene ligand.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis of Functionalized Olefins by Cross and Ring-Closing  
**Metatheses**  
AN 2000:215112 CAPLUS  
DN 133:4435  
TI Synthesis of Functionalized Olefins by Cross and Ring-Closing  
**Metatheses**  
AU Chatterjee, Arnab K.; Morgan, John P.; Scholl, Matthias; Grubbs, Robert H.  
CS Arnold and Mabel Beckman Laboratories of Chemical Synthesis Division of  
Chemistry and Chemical Engineering, California Institute of Technology,  
Pasadena, CA, 91125, USA  
SO Journal of the American Chemical Society (2000), 122(15), 3783-3784  
CODEN: JACSAT; ISSN: 0002-7863  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 133:4435  
AB Functionalized olefins are prep'd. by cross-**metathesis** and  
ring-closing **metathesis** of electron-deficient olefins employing  
a ruthenium alkylidene catalyst. The ruthenium catalyst was demonstrated  
to have high activity and functional group compatibility expanding the  
range of olefins that can participate in olefin **metathesis**

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 14:32:44 ON 29 SEP 2003

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NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/Cplus records now contain indexing from 1907 to the present

NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE  
NEWS 5 Jul 21 Identification of STN records implemented  
NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in September 2003  
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003  
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003  
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation  
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
NEWS 18 SEP 22 DIPPR file reloaded  
NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded  
NEWS 20 SEP 29 DISSABS now available on STN  
  
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
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NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Sep 26, 2003 (20030926/UP).

ACETALSRCH/L	TEMP	26 L-NUMBERS
ACRYLMETATH/A	TEMP	67 ANSWERS IN FILE CAPLUS
ADAMANSRCH/L	TEMP	10 L-NUMBERS
ADAMANTPREP/A	TEMP	51 ANSWERS IN FILE CAPLUS
ADAMANTSP/A	TEMP	64 ANSWERS IN FILE CAPLUS
ALKYLATIN/L	13 DEC 2001	9 L-NUMBERS
CHLOROALA/A	TEMP	14 ANSWERS IN FILE CAPLUS
CYCLIZATN/L	TEMP	10 L-NUMBERS
ESTERODOR/L	05 SEP 2002	42 L-NUMBERS
GENRCACETALS/A	TEMP	148 ANSWERS IN FILE CAPLUS
HALOSM/A	TEMP	1890 ANSWERS IN FILE CAPLUS
INDIUMCL3/A	30 MAY 2001	1 ANSWER IN FILE REGISTRY
LTWENTAUTGFOR/A	04 AUG 2001	72 ANSWERS IN FILE CAPLUS
MESEALA/A	TEMP	241 ANSWERS IN FILE CAPLUS
METATHESIS/L	TEMP	36 L-NUMBERS
NEOTAMECRYST/A	24 APR 2001	59 ANSWERS IN FILE CAPLUS
NOSEARCH/L	TEMP	18 L-NUMBERS
NVLARMFULGEN/A	19 APR 2001	196 ANSWERS IN FILE REGISTRY
POHBENZALDEH/A	10 JUL 2001	5519 ANSWERS IN FILE CAPLUS
PROSTACMPD15/A	01 AUG 2001	34 ANSWERS IN FILE CAPLUS
SELENOCMPDS/L	TEMP	13 L-NUMBERS
STILLEAPP/L	07 JAN 2002	17 L-NUMBERS
TWOAMINOPOLY/Q	16 APR 2001	UPLOADED STRUCTURE

=> DIS SAVED/S  
NO SAVED SDI REQUESTS

=> FIL CAPLUS	COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST		0.06	0.27

FILE 'CAPLUS' ENTERED AT 06:26:34 ON 30 SEP 2003  
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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> ACT ACRYLMETATH/A  
L1 ( 1)SEA FILE=REGISTRY ABB=ON PLU=ON "METHYL ACRYLATE"/CN  
L2 ( 7844)SEA FILE=CAPLUS ABB=ON PLU=ON L1/RCT  
L3 ( 11264)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS

L4 (	67) SEA FILE=CAPLUS ABB=ON	PLU=ON	L2 AND L3
L5 (	40237) SEA FILE=CAPLUS ABB=ON	PLU=ON	RUTHENIUM AND RU
L6 (	40296) SEA FILE=CAPLUS ABB=ON	PLU=ON	L4 OR L5
L7	67 SEA FILE=CAPLUS ABB=ON	PLU=ON	L4 AND L6

=> FIL STNGUIDE COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.69

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FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: Sep 26, 2003 (20030926/UP).

=> ACT METATHESIS/L			
L8	STR		
L9 (	7) SEA FILE=REGISTRY SSS SAM L8		
L10 (	0) SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN		
L11 (	7) SEA FILE=REGISTRY SSS SAM L8		
L12	STR		
L13 (	1) SEA FILE=REGISTRY SSS SAM L12		
L14 (	2) SEA FILE=REGISTRY SSS FUL L12		
L15	STR		
L16 (	14) SEA FILE=REGISTRY EXA FUL L15		
L17 (	334) SEA FILE=CAPLUS ABB=ON PLU=ON L16		
L18 (	157) SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS		
L19 (	0) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS		
L20 (	11263) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS		
L21 (	2) SEA FILE=CAPLUS ABB=ON PLU=ON L17 AND L20		
L22 (	1) SEA FILE=REGISTRY ABB=ON PLU=ON 2-METHYL-2-BUTENE/CN		
L23 (	1) SEA FILE=REGISTRY ABB=ON PLU=ON ISOBUTENE/CN		
L24 (	1) SEA FILE=REGISTRY ABB=ON PLU=ON PROPENE/CN		
L25 (	428) SEA FILE=CAPLUS ABB=ON PLU=ON L22/PREP		
L26 (	13922) SEA FILE=CAPLUS ABB=ON PLU=ON L23		
L27 (	37158) SEA FILE=CAPLUS ABB=ON PLU=ON L24		
L28 (	3908) SEA FILE=CAPLUS ABB=ON PLU=ON L26 AND L27		
L29 (	60) SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND L28		
L30 (	14436) SEA FILE=CAPLUS ABB=ON PLU=ON CARBENE		
L31 (	0) SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L30		
L32 (	11263) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS		
L33 (	3) SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L32		
L34 (	82949) SEA FILE=CAPLUS ABB=ON PLU=ON ACRYLONITRILE		
L35 (	54) SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND L34		
L36 (	145) SEA FILE=CAPLUS ABB=ON PLU=ON CROWE		
L37 (	0) SEA FILE=CAPLUS ABB=ON PLU=ON L35 AND L36		
L38 (	9) SEA FILE=CAPLUS ABB=ON PLU=ON L30 AND L35		
L39 (	91812) SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM OR RU		
L40 (	35740) SEA FILE=CAPLUS ABB=ON PLU=ON OSMIUM OR OS		
L41 (	116120) SEA FILE=CAPLUS ABB=ON PLU=ON L39 OR L40		
L42 (	13) SEA FILE=CAPLUS ABB=ON PLU=ON L41 AND L35		
L43 (	8) SEA FILE=CAPLUS ABB=ON PLU=ON L42 NOT L38		

=> carbene	0 CARBENE		
L44	0 CARBENE		

=> file caplus COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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FULL ESTIMATED COST

ENTRY      SESSION  
0.12      0.81

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> carbene  
      12316 CARBENE  
      7207 CARBENES  
L45      14441 CARBENE  
             (CARBENE OR CARBENES)

=> 17 and 145  
L46      16 L7 AND L45

=> d 146 1-16 ti

L46 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone

L46 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts

L46 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**

L46 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Product subclass 40: allylsilanes

L46 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of ruthenium alkylidene complexes as catalysts for selective ring-opening cross-**metathesis** of cycloolefins with acrylates

L46 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing **metathesis**

L46 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A tertiary phosphine that is too bulky: preparation of catalytically less

active carbene and vinylidene ruthenium(II) complexes

L46 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin Metathesis Involving Ruthenium Enonic Carbene Complexes

L46 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and metathesis reactions of a phosphine-free dihydroimidazole carbene ruthenium complex

L46 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI In Situ Preparation of a Highly Active N-Heterocyclic Carbene -Coordinated Olefin Metathesis Catalyst

L46 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-Soluble Ruthenium Vinylidene and Allenylidene Complexes: Potential Catalysts for Ring-Opening Metathesis

L46 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A series of ruthenium(II) ester-carbene complexes as olefin metathesis initiators: metathesis of acrylates

L46 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes

L46 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cationic ruthenium complexes, their production and their use

L46 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Vinylaminocarbene of Group 6 Metals by Metathesis Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

L46 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Manganese Fischer carbene chemistry: reactions of Cp'(CO)2Mn:C(OMe/OLi)R with enynes, 1-hexyne, and acrylates

=> d 146 1-16 ti fbib abs

L46 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A good bargain: An inexpensive, air-stable ruthenium metathesis catalyst derived from .alpha.-asarone

AN 2003:246866 CAPLUS

DN 139:85476

TI A good bargain: An inexpensive, air-stable ruthenium metathesis catalyst derived from .alpha.-asarone

AU Grela, Karol; Kim, Mikhail

CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01224, Pol.

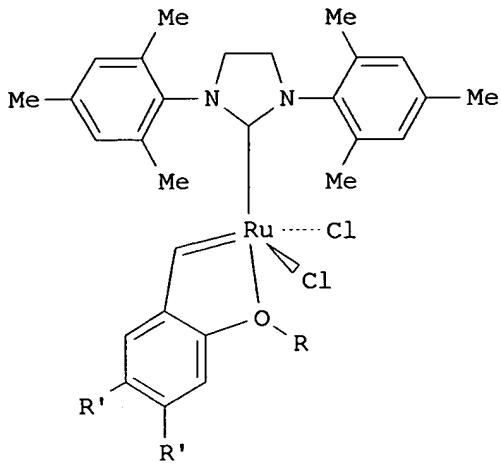
SO European Journal of Organic Chemistry (2003), (6), 963-966  
CODEN: EJOCFK; ISSN: 1434-193X

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

GI



AB One-step synthesis of ruthenium **carbene** precatalyst (I) ( $R = CH_3$ ,  $R' = OCH_3$ ) from inexpensive .alpha.-asarone is described. This recyclable and easy to obtain complex I was used successfully in various types of **metathesis** reactions (RCM, CM, enyne) as a cheaper and more potent substitute of the Hoveyda-type precatalyst I ( $R = i\text{-Pr}$ ,  $R' = H$ ).

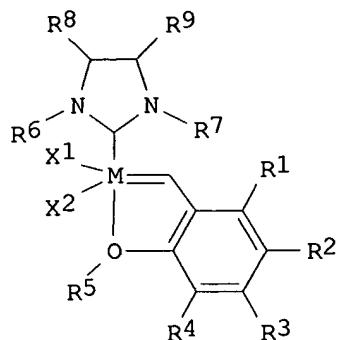
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts  
AN 2003:117835 CAPLUS  
DN 138:170361  
TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts  
IN Blechert, Siegfried; Wakamatsu, Hideaki  
PA Bayer Aktiengesellschaft, Germany  
SO PCT Int. Appl., 42 pp.  
CODEN: PIXXD2

DT Patent  
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003011875	A1	20030213	WO 2002-EP8009	20020718
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
				DE 2001-10137051A	20010731
DE	10137051	A1	20030220	DE 2001-10137051	20010731
OS	CASREACT 138:170361; MARPAT 138:170361				
GI					



I

AB The invention relates to the prepn. of novel transition-metal complexes I (M = Group 8 transition metal, X1; X2 = anionic ligands; R1-R4 = H, C1-50 alkyl, cycloalkyl, cyano, halo, alkoxy, etc.; R5 = H, C1-50 cyclic or straight chain alkyl or aryl; R6, R7 = C1-30 cyclic or straight chain alkyl; R8, R9 = H, R8R9 = bond), intermediates in the prodn. thereof and the use as catalysts in org. reactions, in particular in **metathesis** reactions. Thus, CuCl mediated reaction of 2-isopropoxy-3-vinylbiphenyl (prepn. given) with tricyclohexylphosphine[1,3-bis(2,4,6-trimethylphenyl)-4,5-dihydroimidazol-2-ylidene][benzylidene]**ruthenium(IV)** dichloride in CH<sub>2</sub>Cl<sub>2</sub> gave title catalyst I (M = **Ru**, X1, X2 = Cl, R1-R3 = H, R4 = Ph, R5 = iPr, R6, R7 = mesityl, R8, R9 = H) which catalyzed cyclization of TsN(CH<sub>2</sub>CH:CH<sub>2</sub>)<sub>2</sub> to give N-tosyl-2,5-dihydropyrrole.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**  
 AN 2003:45406 CAPLUS  
 DN 138:254985  
 TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**  
 AU Alcaide, Benito; Almendros, Pedro; Alonso, Jose M.; Redondo, Maria C.  
 CS Departamento de Quimica Organica I, Facultad de Quimica, Universidad Complutense, Madrid, 28040, Spain  
 SO Journal of Organic Chemistry (2003), 68(4), 1426-1432  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 138:254985  
 AB Conveniently substituted bis-.beta.-lactams, pyrrolidinyl-.beta.-lactams, and piperidinyl-.beta.-lactams undergo ring-closing **metathesis** using Grubbs' **carbene**, Cl<sub>2</sub>(Cy<sub>3</sub>P)<sub>2</sub>Ru:CHPh, to give medium-sized rings fused to bis-2-azetidinone, pyrrolidinyl-2-azetidinone, or piperidinyl-2-azetidinone systems. The diolefinic cyclization precursors can be obtained from optically pure 4-oxoazetidine-2-carbaldehydes bearing an extra alkene tether at position 1 or 3 of the .beta.-lactam ring via [2 + 2] cycloaddn. of imino 2-azetidinones, N-metallated azomethine ylide [3 + 2] cycloaddn., and subsequent N-acylation of the pyrrolidinyl nitrogen atom, or through aza-Diels-Alder cycloaddn. of 2-azetidinone-tethered imines. Under std. reaction conditions, the combination of cycloaddn.

reactions of 2-azetidinone-tethered imines with ring-closing metathesis offers an asym. entry to a variety of unusual fused tricyclic 2-azetidinones bearing two bridgehead nitrogen atoms.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

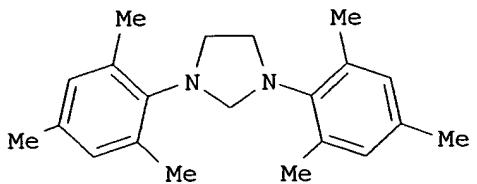
L46 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Product subclass 40: allylsilanes  
AN 2002:863863 CAPLUS  
DN 139:53057  
TI Product subclass 40: allylsilanes  
AU Sarkar, T. K.  
CS Dept. of Chemistry, Indian Institute of Technology, Kharagpur, 721302, India  
SO Science of Synthesis (2002), 4, 837-925  
CODEN: SSCYJ9  
PB Georg Thieme Verlag  
DT Journal; General Review  
LA English  
AB A review of synthesis and reactions of allylsilanes. Covered reactions include couplings, condensations, eliminations, condensations, cycloaddns., redns., and cyclizations.

RE.CNT 325 THERE ARE 325 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of ruthenium alkylidine complexes as catalysts for selective ring-opening cross-metathesis of cycloolefins with acrylates  
AN 2002:777865 CAPLUS  
DN 137:279309  
TI Preparation of ruthenium alkylidine complexes as catalysts for selective ring-opening cross-metathesis of cycloolefins with acrylates  
IN Morgan, John P.; Morrill, Christie; Grubbs, Robert H.; Choi, Tae-Lim  
PA California Institute of Technology, USA  
SO PCT Int. Appl., 60 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002079127	A1	20021010	WO 2002-US10395	20020401
			W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	US 2001-280601PP 20010330
US 2002198426	A1	20021226	US 2002-114674	20020401
			US 2001-280601PP	20010330
OS	MARPAT	137:279309		
GI				



AB A catalytic method is provided for a ring-opening cross-metathesis reaction between a cycloolefinic substrate and a second olefinic reactant, wherein the catalyst used is a transition metal alkylidene complex substituted with an N-heterocyclic carbene ligand. The substrates are selected so that the rate of the cross-metathesis reaction of the second olefinic reactant,  $k_{CM}$ , is greater than or equal to the rate of the ring-opening metathesis reaction,  $k_{Ro}$ . In this way, the predominant ROCM product is a monomer, dimer, and/or oligomer, but not a polymer. The invention addnl. provides for selective prodn. of an end-differentiated olefinic product, using trisubstituted cycloolefins as substrates and/or a subsequent cross-metathesis reaction following an initial ROCM step. The cycloolefinic substrates include low-strain olefins such as cyclohexene as well as higher strain olefins such as cyclooctene. The predominant teaching involves the ring-opening cross-metathesis of cycloolefins with acroyl species in the presence of ruthenium alkylidene complex catalysts. In a typical example, 1,5-COD undergoes ROCM with Me acrylate in the presence of  $RuCl_2(:CHPh)(IMesH_2)(PCy_3)$  (synthetic prepn. given) [ $IMesH_2 = (I)$ ] to give 78% of the corresponding ring-opened metathesis dimer.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing metathesis  
 AN 2002:10410 CAPLUS  
 DN 136:70246  
 TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing metathesis  
 IN Grubbs, Robert H.; Chatterjee, Arnab K.; Morgan, John P.; Scholl, Matthias; Choi, Tae-lim  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 44 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002000590	A1	20020103	WO 2001-US20180	20010625
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		US 2000-213757PP	20000623
US	2002137978	A1	20020926	US 2001-891144	20010625
				US 2000-213757PP	20000623

EP 1301458

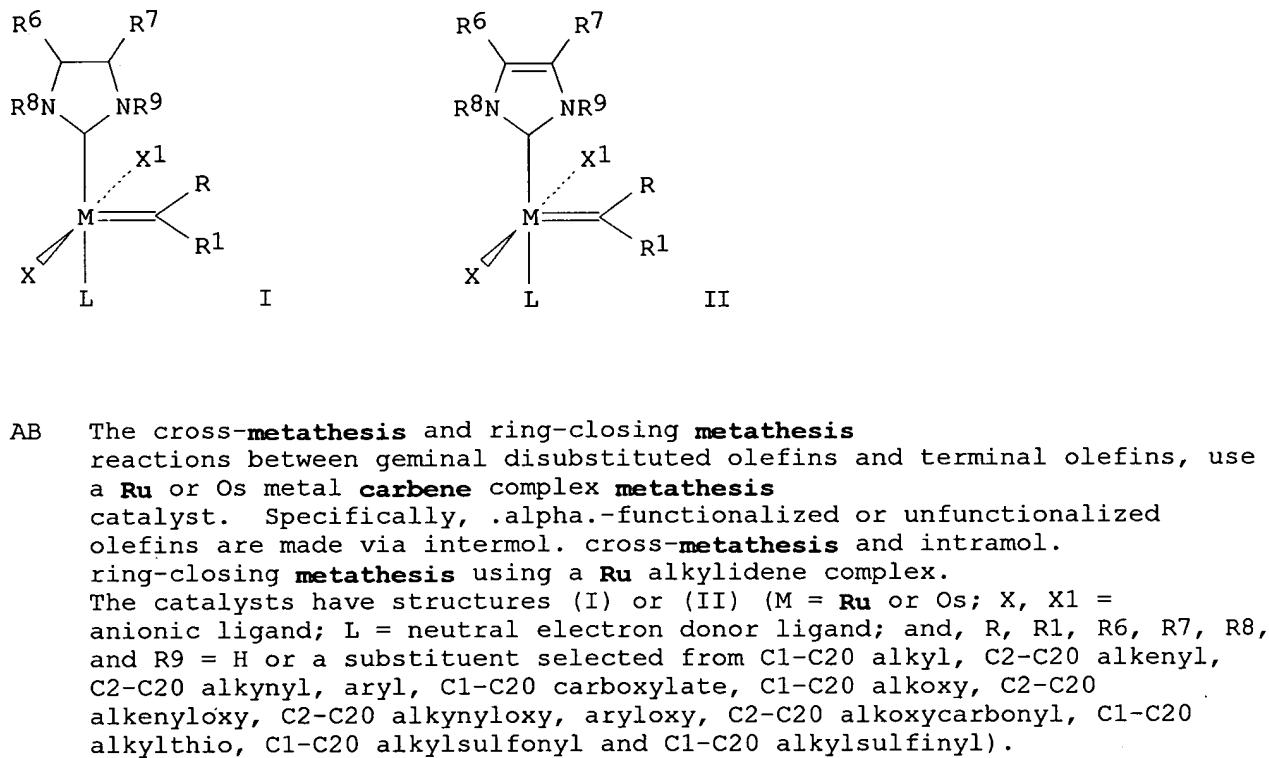
A1 20030416

EP 2001-950437 20010625

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2000-213757PP 20000623

WO 2001-US20180W 20010625

OS MARPAT 136:70246  
GI

**AB** The cross-**metathesis** and ring-closing **metathesis** reactions between geminal disubstituted olefins and terminal olefins, use a **Ru** or **Os** metal **carbene** complex **metathesis** catalyst. Specifically, .alpha.-functionalized or unfunctionalized olefins are made via intermol. cross-**metathesis** and intramol. ring-closing **metathesis** using a **Ru** alkylidene complex. The catalysts have structures (I) or (II) ( $M = \text{Ru}$  or  $\text{Os}$ ;  $X, X_1 =$  anionic ligand;  $L =$  neutral electron donor ligand; and,  $R, R_1, R_6, R_7, R_8,$  and  $R_9 = H$  or a substituent selected from C1-C20 alkyl, C2-C20 alkenyl, C2-C20 alkynyl, aryl, C1-C20 carboxylate, C1-C20 alkoxy, C2-C20 alkenyloxy, C2-C20 alkynyoxy, aryloxy, C2-C20 alkoxy carbonyl, C1-C20 alkylthio, C1-C20 alkylsulfonyl and C1-C20 alkylsulfinyl).

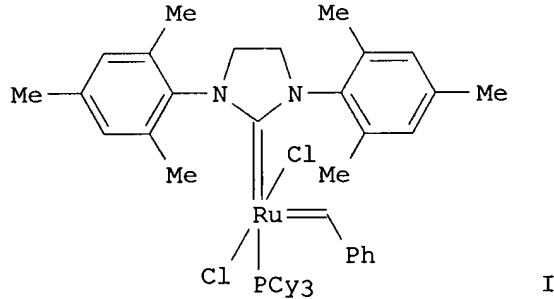
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L46 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI A tertiary phosphine that is too bulky: preparation of catalytically less active **carbene** and vinylidene **ruthenium(II)** complexes  
 AN 2001:925827 CAPLUS  
 DN 136:294927  
 TI A tertiary phosphine that is too bulky: preparation of catalytically less active **carbene** and vinylidene **ruthenium(II)** complexes  
 AU Stuer, Wolfram; Wolf, Justin; Werner, Helmut  
 CS Institut fur Anorganische Chemie, Universitat Wurzburg, Wurzburg, D-97074, Germany  
 SO Journal of Organometallic Chemistry (2002), 641(1-2), 203-207  
 CODEN: JORCAI; ISSN: 0022-328X  
 PB Elsevier Science S.A.  
 DT Journal  
 LA English  
 OS CASREACT 136:294927  
 AB Tricyclooctylphosphine PCoc<sub>3</sub> (1), which was prep'd. from PCl<sub>3</sub> and cyclooctyl Grignard reagent, reacts under an atm. of H<sub>2</sub> with the dimer [RuCl<sub>2</sub>(.eta.3:.eta.3-C<sub>10</sub>H<sub>16</sub>)<sub>2</sub>] (2) to give the hydrido(dihydrogen) complex [RuHCl(H<sub>2</sub>)(PCoc<sub>3</sub>)<sub>2</sub>] (4); in contrast, treatment of 2 with PPh<sub>3</sub> under the same conditions affords [RuHCl(PPh<sub>3</sub>)<sub>3</sub>] (3). The reaction of 4 with

acetylene in the presence of MgCl<sub>2</sub> and H<sub>2</sub>O gives the **Ru carbene** [RuCl<sub>2</sub>(:CHCH<sub>3</sub>)(PCoc<sub>3</sub>)<sub>2</sub>] (5) in 70% isolated yield. In the absence of MgCl<sub>2</sub> and H<sub>2</sub>O, 4 reacts with acetylene at low temp. to give the hydrido(vinylidene) complex [RuHCl(:C:CH<sub>2</sub>)(PCoc<sub>3</sub>)<sub>2</sub>] (6) almost quant. Compds. 5, 6 and [RuH(.kappa.2-O<sub>2</sub>CCF<sub>3</sub>)(:C:CH<sub>2</sub>)(PCoc<sub>3</sub>)<sub>2</sub>] (7), the latter being obtained from 6 and CF<sub>3</sub>CO<sub>2</sub>K by ligand exchange, are poor catalysts for ROMP and cross olefin **metathesis**.

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene**  
 Complexes  
 AN 2001:699173 CAPLUS  
 DN 136:19856  
 TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene**  
 Complexes  
 AU Choi, Tae-Lim; Lee, Choon Woo; Chatterjee, Arnab K.; Grubbs, Robert H.  
 CS Arnold and Mabel Beckman Laboratories of Chemical Synthesis Division of  
 Chemistry and Chemical Engineering, California Institute of Technology,  
 Pasadena, CA, 91125, USA  
 SO Journal of the American Chemical Society (2001), 123(42), 10417-10418  
 CODEN: JACSAT; ISSN: 0002-7863  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 136:19856  
 GI



AB Unsatd. diesters and diketones were prep'd. stereoselectively in 41-99% yields by olefin **metathesis** of acrylate esters and .alpha.,.beta.-unsatd. ketones in the presence of ruthenium **carbene** catalyst I (Cy = cyclohexyl). Ruthenium **carbene** complexes contg. carbonylmethylene groups are formed in situ as the active **metathesis** catalysts. Acrylates undergo **metathesis** in the presence of I at concns. of 0.40M, while unsatd. ketones undergo **metathesis** at concn. of 0.05M; acrylate-derived ruthenium **carbene** complexes were not as stable and required higher concns. of alkene to form catalytic effective concns. of alkoxy carbonylmethylene ruthenium complexes, while the **carbene** complexes derived from unsatd. ketones were more stable and required lower concns. of reactants to generate catalytically active concns. of ruthenium enoic **carbene** catalysts. Both acrylates and .alpha.,.beta.-unsatd. ketones underwent ring-opening cross-**metathesis** reactions with

cyclohexene and cross-**metathesis** reactions with 2-methyl-1-hexene and methylenecyclohexane to give unsym. substituted products. The use of the imidazolidinylideneruthenium catalyst stabilizes electron-withdrawing ruthenium **carbene** moieties and allows **metathesis** reactions with acrylates and .alpha.,.beta.-unsatd. ketones to proceed in high yields.

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene ruthenium** complex  
AN 2000:872572 CAPLUS  
DN 134:207942  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene ruthenium** complex  
AU Gessler, Simon; Rndl, Stefan; Blechert, Siegfried  
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin, D-10623, Germany  
SO Tetrahedron Letters (2000), 41(51), 9973-9976  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB Synthesis and activity in ring closure **metathesis** (RCM) and cross **metathesis** (CM) of the phosphine-free 1,3-dimesityl-2-imidazolidinylidene (IHMes) **Ru** alkoxybenzylidene complex ([RuCl<sub>2</sub>(IHmes)(2-iPROC<sub>6</sub>H<sub>4</sub>CH)]) are reported. The activities of the above complex and [RuCl<sub>2</sub>(PCy<sub>3</sub>)(CHPh)(IHmes)] were compared.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**-Coordinated Olefin **Metathesis** Catalyst  
AN 2000:621214 CAPLUS  
DN 133:349821  
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**-Coordinated Olefin **Metathesis** Catalyst  
AU Morgan, John P.; Grubbs, Robert H.  
CS Arnold and Mabel Beckman Laboratories for Chemical Synthesis, California Institute of Technology, Pasadena, CA, 91125, USA  
SO Organic Letters (2000), 2(20), 3153-3155  
CODEN: ORLEF7; ISSN: 1523-7060  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 133:349821  
AB Highly active N-heterocyclic **carbene**-coordinated catalysts may be synthesized and used in situ, without requiring prior isolation of the catalyst. Activation of this in situ catalyst with ethereal HCl dramatically reduces the reaction times required for high conversions. A variety of .alpha.,.beta.-unsatd. carbonyl-contg. substrates participate readily in cross and ring-closing **metathesis** reactions using this prepn.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes: Potential Catalysts for Ring-Opening **Metathesis**  
AN 2000:607751 CAPLUS

DN 133:335320  
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes:  
Potential Catalysts for Ring-Opening **Metathesis**  
AU Saoud, Mustapha; Romerosa, Antonio; Peruzzini, Maurizio  
CS Area de Quimica Inorganica, Universidad de Almeria, Almeria, 04071, Spain  
SO Organometallics (2000), 19(20), 4005-4007  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 133:335320  
AB Reaction of the water-sol. **Ru** complex  
[ $\{\text{RuCl}_2(\text{TPPMS})_2\}\text{Na}_2]_2 \cdot \text{cntdot} \cdot 4\text{H}_2\text{O}$  with phenylacetylene and  
diphenylpropargyl alc. in THF at room temp. gave the water-sol. unsatd.  
**carbenes** [ $\{\text{RuCl}_2(\text{C:CHPh})_2\}\text{Na}_2$ ] and [ $\{\text{RuCl}(\mu-\text{Cl})(\text{C:C:CPH}_2)_2\}_2\text{Na}_4$ , resp. The ability of these complexes, which  
represent the 1st examples of water-sol. vinylidenes and allenylidenes, to  
catalyze the ring-opening **metathesis** of cyclic olefins with Me  
acrylate as chain transfer reagents is briefly discussed.  
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A series of ruthenium(II) ester-**carbene** complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates  
AN 2000:443431 CAPLUS  
DN 133:207970  
TI A series of ruthenium(II) ester-**carbene** complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates  
AU Ulman, M.; Belderrain, T. R.; Grubbs, R. H.  
CS Division of Chemistry and Chemical Engineering, The Arnold and Mabel  
Beckman Laboratory of Chemical Synthesis, California Institute of  
Technology, Pasadena, CA, 91125, USA  
SO Tetrahedron Letters (2000), 41(24), 4689-4693  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB A series of ester-**carbene** complexes,  $\text{Cl}_2(\text{Cy}_3\text{P})_2\text{Ru:CHZ}$  ( $Z = \text{CO}_2\text{R}$ ,  
 $\text{R} = \text{Me, p-tolyl, t-Bu, iPr, cyclohexyl, 1-adamantyl, Ph}$ ), were  
synthesized. These complexes were highly active for the  
**metathesis** of olefinic substrates; including acrylates and  
trisubstituted olefins. In addn., the ester-**carbene** moiety is  
thermodynamically high in energy. As a result, these complexes react to  
ring-open cyclohexene by **metathesis** to alleviate the thermodn.  
strain of the ester-**carbene** ligand.  
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

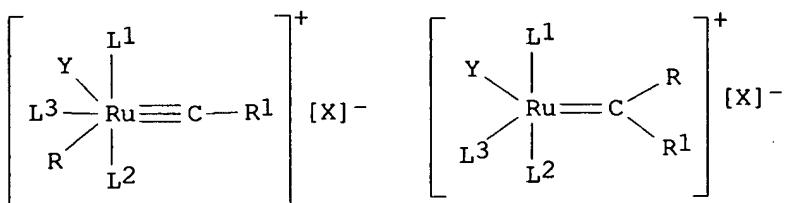
L46 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes  
AN 1999:757384 CAPLUS  
DN 132:93445  
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes  
AU Campora, Juan; Hudson, Sarah A.; Massiot, Philippe; Maya, Celia M.; Palma,  
Pilar; Carmona, Ernesto; Martinez-Cruz, Luis A.; Vegas, Angel  
CS Departamento de Quimica Inorganica-Instituto de Investigaciones Quimicas,  
Universidad de Sevilla-Consejo Superior de Investigaciones Cientificas,  
Seville, 41092, Spain  
SO Organometallics (1999), 18(25), 5225-5237  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society

DT Journal  
LA English  
OS CASREACT 132:93445  
AB The reaction of benzylpalladium complexes trans-[Pd(CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Z)(X)(PR<sub>3</sub>)<sub>2</sub>] (2) with isocyanides yields imidoyl complexes that exist in soln. as equil. mixts. of the corresponding imine ([Pd(C(:NR')CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Z)(X)(PR<sub>3</sub>)<sub>2</sub>], 3-im) and enamine ([Pd(C(NHR'):CHC<sub>6</sub>H<sub>4</sub>Z)(X)(PR<sub>3</sub>)<sub>2</sub>], 3-en) tautomers. While the equil. const. is markedly affected by the electronic effect exerted by the substituents at the Ph ring (Z), the effect of the metal fragment is less pronounced and is dominated by steric factors. Both tautomeric forms can also be found in the solid state, and the x-ray structures of complexes of type 2, 3-im, and 3-en were detd.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cationic ruthenium complexes, their production and their use  
AN 1999:736714 CAPLUS  
DN 131:337174  
TI Cationic ruthenium complexes, their production and their use  
IN Schwab, Peter; Schulz, Michael; Wolf, Justin; Stuer, Wolfram; Werner, Helmut  
PA BASF Aktiengesellschaft, Germany  
SO PCT Int. Appl., 21 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9958538	A1	19991118	WO 1999-EP2992	19990503
	W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE	
				DE 1998-19820652A	19980508
	DE 19820652	A1	19991111	DE 1998-19820652	19980508
	AU 9939301	A1	19991129	AU 1999-39301	19990503
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
	EP 1075482	A1	20010214	EP 1999-922156	19990503
	EP 1075482	B1	20020403		
		R: BE, CH, DE, FR, GB, IT, LI, NL		DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
	JP 2002514651	T2	20020521	JP 2000-548342	19990503
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
	US 6500975	B1	20021231	US 2000-674536	20001102
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
OS	MARPAT	131:337174			
GI					



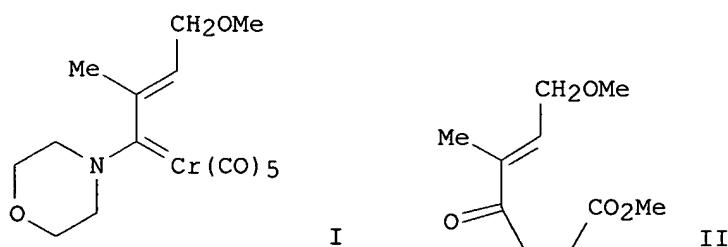
I

II

AB The invention relates to cationic ruthenium complexes I and II or mixts. contg. same, where II can be stabilized by a further ligand L<sup>4</sup> and X is an anion which is not or weakly coordinated to the metal center; Y is a monodentate or multidentate anionic ligand; R and R' each independently of each other are hydrogen or a possibly substituted C<sub>1</sub>-20 alkyl-, C<sub>6</sub>-20-aryl-, or C<sub>7</sub>-20 alkylaryl rest; and L<sup>1</sup>, L<sup>2</sup>, L<sup>3</sup> and L<sup>4</sup> independently of each other are neutral electron donor ligands. Thus, reaction of [RuCl<sub>2</sub>(C<sub>8</sub>H<sub>12</sub>)<sub>n</sub>] with tricyclohexylphosphine in 2-butanol in the presence of hydrogen gave 75% RuHCl(H<sub>2</sub>)(PCy<sub>3</sub>)<sub>2</sub> which on treatment with acetylene gave RuHCl(:C:CH<sub>2</sub>)(PCy<sub>3</sub>)<sub>2</sub>. Treatment of RuHCl(:C:CH<sub>2</sub>)(PCy<sub>3</sub>)<sub>2</sub> with [PhNMe<sub>2</sub>H][B(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>] in CH<sub>2</sub>Cl<sub>2</sub> gave catalyst [RuClH(.tplbond.CMe)(NMe<sub>2</sub>Ph)(PCy<sub>3</sub>)<sub>2</sub>][B(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>] (I). The catalytic activity of I for ring opening metathesis polymn. of cyclooctene and ring opening metathesis of cyclopentene with Me acrylate is described.

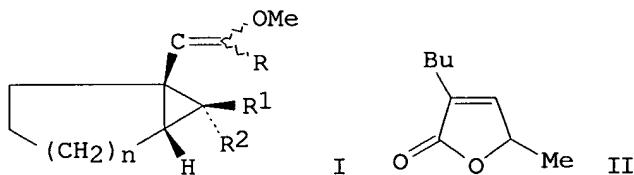
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
 AN 1995:397673 CAPLUS  
 DN 122:187739  
 TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
 AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo  
 CS Instituto Universitario de Quimica Organometalica Enrique Moles, Universidad de Oviedo, Oviedo, 33071, Spain  
 SO Organometallics (1995), 14(3), 1429-33  
 CODEN: ORGND7; ISSN: 0276-7333  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 122:187739  
 GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type vinylaminocarbenes, e.g., I, by the **metathesis** reaction of 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of the vinylaminocarbenes with electron-deficient alkenes to afford, after hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this behavior, a cyclopropanation process was proposed.

L46 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Manganese Fischer **carbene** chemistry: reactions of Cp'(CO)2Mn:C(OMe/OLi)R with enynes, 1-hexyne, and acrylates  
 AN 1991:23434 CAPLUS  
 DN 114:23434  
 TI Manganese Fischer **carbene** chemistry: reactions of Cp'(CO)2Mn:C(OMe/OLi)R with enynes, 1-hexyne, and acrylates  
 AU Hoye, Thomas R.; Rehberg, Gretchen M.  
 CS Dep. Chem., Univ. Minnesota, Minneapolis, MN, 55455, USA  
 SO Organometallics (1990), 9(12), 3014-15  
 CODEN: ORGND7; ISSN: 0276-7333  
 DT Journal  
 LA English  
 OS CASREACT 114:23434  
 GI



AB Cp'(CO)2Mn:C(OMe)R ( $Cp' = C_5H_4Me$ ; R = Me, Ph) were treated with HC.tplbond.CCH<sub>2</sub>C(CO<sub>2</sub>Me)<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>CH:CR<sub>1</sub>R<sub>2</sub> (R<sub>1</sub>, R<sub>2</sub> = H, Me; n = 1,2) to give bicyclic vinylcyclopropanes I as a mixt. of E- and Z-enol ethers which hydrolyzed upon standing in air to the cyclopropyl ketones. There was no evidence for cyclobutanone, furan or **metathesis** products from these reactions which shows that CO insertion into vinylogous **carbene** intermediates to generate ketene complexes is disfavored relative to internal cyclopropanation. Reaction of Cp'(CO)3Mn with MeLi to generate Cp'(CO)2Mn:C(OLi)Me and reaction with BuC.tplbond.CH generated butenolide II in a manner analogous to that obsd. for the acyl(pentacarbonyl)chromate species. The in situ reaction of Cp'(CO)2Mn:C(OLi)Me with R<sub>3</sub>CH:CR<sub>4</sub>CO<sub>2</sub>Me (R<sub>3</sub>, R<sub>4</sub> = H, Me) gave AcCHR<sub>3</sub>CHR<sub>4</sub>CO<sub>2</sub>Me which are formally the products of the addn of an acetyl anion in a Michael fashion to the enoates.

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
------------------	---------------

FULL ESTIMATED COST

48.99 49.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
------------------	---------------

CA SUBSCRIBER PRICE

-10.42 -10.42

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 06:32:53 ON 30 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CAPLUS' AT 07:20:34 ON 30 SEP 2003  
FILE 'CAPLUS' ENTERED AT 07:20:34 ON 30 SEP 2003  
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	48.99	49.80
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.42	-10.42

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	48.99	49.80
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.42	-10.42

FILE 'REGISTRY' ENTERED AT 07:20:49 ON 30 SEP 2003  
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STRUCTURE FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6  
DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> me methyl acrylate/cn  
L47 0 ME METHYL ACRYLATE/CN

=> e methyl acrylate/cn  
E1 1 METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN  
E2 1 METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP

OLYMER/CN

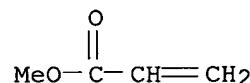
E3	1 --> METHYL ACRYLATE/CN
E4	1 METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E5	1 METHYL ACRYLATE DIANION/CN
E6	1 METHYL ACRYLATE DIMER/CN
E7	1 METHYL ACRYLATE HOMOPOLYMER/CN
E8	1 METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN
E9	1 METHYL ACRYLATE HOMOPOLYMER DODECYL ESTER/CN
E10	1 METHYL ACRYLATE HOMOPOLYMER EICOSYL ESTER/CN
E11	1 METHYL ACRYLATE HOMOPOLYMER ESTER WITH 1-(2-HYDROXYETHYL) PYRROLIDINE/CN
E12	1 METHYL ACRYLATE HOMOPOLYMER ESTER WITH 2-(2-HYDROXYETHYL) PYRIDINE/CN

=> e3

L48 1 "METHYL ACRYLATE"/CN

=> d 148

L48 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 96-33-3 REGISTRY  
CN 2-Propenoic acid, methyl ester (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Acrylic acid methyl ester (6CI, 8CI)  
OTHER NAMES:  
CN 2-Propenoic acid methyl ester  
CN Methoxycarbonylethylene  
CN **Methyl acrylate**  
CN Methyl acrylic ester  
CN Methyl prop-2-enoate  
CN Methyl propenoate  
CN NSC 24146  
FS 3D CONCORD  
DR 102256-29-1  
MF C4 H6 O2  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*,  
EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*,  
HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,  
PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA,  
ULIDAT, USPAT2, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11557 REFERENCES IN FILE CA (1907 TO DATE)  
835 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
11577 REFERENCES IN FILE CAPLUS (1907 TO DATE)

313 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> e 1-hexene/cn

E1 1 1-HEXEN-6-YL ACRYLATE/CN  
 E2 1 1-HEXEN-6-YL METHACRYLATE/CN  
 E3 1 --> 1-HEXENE/CN  
 E4 1 1-HEXENE CARBONATE/CN  
 E5 1 1-HEXENE COMPOUND WITH IODINE (1:1)/CN  
 E6 1 1-HEXENE COMPOUND WITH IODINE CHLORIDE (ICL) (1:1)/CN  
 E7 1 1-HEXENE DIMER/CN  
 E8 1 1-HEXENE EPOXIDE/CN  
 E9 1 1-HEXENE OXIDE/CN  
 E10 1 1-HEXENE OXIDE-D-LACTIDE-L-LACTIDE-PROPYLENE GLYCOL-PYROMELL  
     ITIC DIANHYDRIDE COPOLYMER/CN  
 E11 1 1-HEXENE OXIDE-METHYL 4,5-EPOXPENTANOATE COPOLYMER/CN  
 E12 1 1-HEXENE OXIDE-METHYL 7,8-EPOXYOCTANOATE COPOLYMER/CN

=> e3

L49 1 1-HEXENE/CN

=> d 149

L49 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 592-41-6 REGISTRY

CN 1-Hexene (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-n-Hexene

CN Dialen 6

CN Hexene

CN NSC 74121

FS 3D CONCORD

DR 153522-12-4, 33004-04-5

MF C6 H12

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*,  
 EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*,  
 HSDB\*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*,  
 PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2,  
 USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>2</sub>C=CH-Bu-n

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9492 REFERENCES IN FILE CA (1907 TO DATE)

147 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9500 REFERENCES IN FILE CAPLUS (1907 TO DATE)

6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

	ENTRY	SESSION
FULL ESTIMATED COST	16.82	66.62
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	0.00	-10.42

FILE 'CAPLUS' ENTERED AT 07:22:01 ON 30 SEP 2003  
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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
 FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 148  
 L50 11583 L48

=> 149  
 L51 9503 L49

=> 150 and 151  
 L52 228 L50 AND L51

=> d his

(FILE 'HOME' ENTERED AT 06:25:35 ON 30 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 06:25:47 ON 30 SEP 2003

FILE 'CAPLUS' ENTERED AT 06:26:34 ON 30 SEP 2003  
 ACT ACRYLMETATH/A

```
-----
L1 ( 1)SEA FILE=REGISTRY ABB=ON PLU=ON "METHYL ACRYLATE"/CN
L2 ( 7844)SEA FILE=CAPLUS ABB=ON PLU=ON L1/RCT
L3 ( 11264)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS
L4 ( 67)SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND L3
L5 ( 40237)SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM AND RU
L6 ( 40296)SEA FILE=CAPLUS ABB=ON PLU=ON L4 OR L5
L7 ( 67 SEA FILE=CAPLUS ABB=ON PLU=ON L4 AND L6
-----
```

FILE 'STNGUIDE' ENTERED AT 06:26:36 ON 30 SEP 2003  
 ACT METATHESIS/L

```
-----
L8 ( STR
L9 ( 7)SEA FILE=REGISTRY SSS SAM L8
```

L10 ( 0) SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN  
L11 ( 7) SEA FILE=REGISTRY SSS SAM L8  
L12 STR  
L13 ( 1) SEA FILE=REGISTRY SSS SAM L12  
L14 ( 2) SEA FILE=REGISTRY SSS FUL L12  
L15 STR  
L16 ( 14) SEA FILE=REGISTRY EXA FUL L15  
L17 ( 334) SEA FILE=CAPLUS ABB=ON PLU=ON L16  
L18 ( 157) SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS  
L19 ( 0) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L20 ( 11263) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L21 ( 2) SEA FILE=CAPLUS ABB=ON PLU=ON L17 AND L20  
L22 ( 1) SEA FILE=REGISTRY ABB=ON PLU=ON 2-METHYL-2-BUTENE/CN  
L23 ( 1) SEA FILE=REGISTRY ABB=ON PLU=ON ISOBUTENE/CN  
L24 ( 1) SEA FILE=REGISTRY ABB=ON PLU=ON PROPENE/CN  
L25 ( 428) SEA FILE=CAPLUS ABB=ON PLU=ON L22/PREP  
L26 ( 13922) SEA FILE=CAPLUS ABB=ON PLU=ON L23  
L27 ( 37158) SEA FILE=CAPLUS ABB=ON PLU=ON L24  
L28 ( 3908) SEA FILE=CAPLUS ABB=ON PLU=ON L26 AND L27  
L29 ( 60) SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND L28  
L30 ( 14436) SEA FILE=CAPLUS ABB=ON PLU=ON CARBENE  
L31 ( 0) SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L30  
L32 ( 11263) SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L33 ( 3) SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L32  
L34 ( 82949) SEA FILE=CAPLUS ABB=ON PLU=ON ACRYLONITRILE  
L35 ( 54) SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND L34  
L36 ( 145) SEA FILE=CAPLUS ABB=ON PLU=ON CROWE  
L37 ( 0) SEA FILE=CAPLUS ABB=ON PLU=ON L35 AND L36  
L38 ( 9) SEA FILE=CAPLUS ABB=ON PLU=ON L30 AND L35  
L39 ( 91812) SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM OR RU  
L40 ( 35740) SEA FILE=CAPLUS ABB=ON PLU=ON OSMIUM OR OS  
L41 ( 116120) SEA FILE=CAPLUS ABB=ON PLU=ON L39 OR L40  
L42 ( 13) SEA FILE=CAPLUS ABB=ON PLU=ON L41 AND L35  
L43 ( 8) SEA FILE=CAPLUS ABB=ON PLU=ON L42 NOT L38

-----  
L44 0 CARBENE

FILE 'CAPLUS' ENTERED AT 06:27:33 ON 30 SEP 2003

L45 14441 CARBENE  
L46 16 L7 AND L45

FILE 'REGISTRY' ENTERED AT 07:20:49 ON 30 SEP 2003

L47 0 ME METHYL ACRYLATE/CN  
E METHYL ACRYLATE/CN  
L48 1 E3  
E 1-HEXENE/CN  
L49 1 E3

FILE 'CAPLUS' ENTERED AT 07:22:01 ON 30 SEP 2003

L50 11583 L48  
L51 9503 L49  
L52 228 L50 AND L51

=> 120 and 152  
11220 METATHESIS  
159 METATHESES  
11268 METATHESIS  
(METATHESIS OR METATHESES)  
L53 1 L20 AND L52

=> d 153 ti fbib abs

L53 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and application of novel catalytically active polymers  
containing 1,4,7-triazacyclononanes  
AN 2001:694156 CAPLUS  
DN 136:86166  
TI Synthesis and application of novel catalytically active polymers  
containing 1,4,7-triazacyclononanes  
AU Grenz, Achim; Ceccarelli, Simona; Bolm, Carsten  
CS Institut fuer Organische Chemie der RWTH Aachen, Aachen, D-52056, Germany  
SO Chemical Communications (Cambridge, United Kingdom) (2001), (18),  
1726-1727  
CODEN: CHCOFS; ISSN: 1359-7345  
PB Royal Society of Chemistry  
DT Journal  
LA English  
AB New polymers contg. 1,4,7-triazacyclononanes have been synthesized by  
means of ring opening **metathesis** polymn. (ROMP); their complexes  
with Mn catalyze the oxidn. of simple olefins by hydrogen peroxide.  
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		5.39	72.01
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		SINCE FILE	TOTAL
CA SUBSCRIBER PRICE		ENTRY	SESSION
		-0.65	-11.07

FILE 'REGISTRY' ENTERED AT 07:23:45 ON 30 SEP 2003  
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STRUCTURE FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6  
DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e methyl 2-heptenoate/cn

E1	1	METHYL 2-GERANYL-3-OXOBUTANOATE/CN
E2	1	METHYL 2-HEPTADECENOATE/CN
E3	1 -->	METHYL 2-HEPTENOATE/CN
E4	1	METHYL 2-HEPTYL-4,6-DIHYDROXYBENZOATE/CN
E5	1	METHYL 2-HEPTYL-4,6-DIMETHOXYBENZOATE/CN
E6	1	METHYL 2-HEPTYL-4-HYDROXY-6-METHOXYBENZOATE/CN
E7	1	METHYL 2-HEPTYNOATE/CN

E8 1 METHYL 2-HEXADECYLGlycidate/CN  
E9 1 METHYL 2-HEXADECYLOCTADECANOATE/CN  
E10 1 METHYL 2-HEXADECYNOATE/CN  
E11 1 METHYL 2-HEXENOATE/CN  
E12 1 METHYL 2-HEXYL ACRYLATE/CN

=> e3

L54 1 "METHYL 2-HEPTENOATE"/CN

=> d 154

L54 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 22104-69-4 REGISTRY

CN 2-Heptenoic acid, methyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Methyl 2-heptenoate**

FS 3D CONCORD

MF C8 H14 O2

LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
CHEMINFORMRX, CSCHEM, SPECINFO, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

18 REFERENCES IN FILE CA (1907 TO DATE)  
18 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.10	79.11
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-11.07

FILE 'CAPLUS' ENTERED AT 07:25:25 ON 30 SEP 2003  
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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 154/prep

18 L54

3057580 PREP/RL

L55 7 L54/PREP

(L54 (L) PREP/RL)

=> 152 and 155

L56 0 L52 AND L55

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

2.14

81.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

SESSION

CA SUBSCRIBER PRICE

0.00

-11.07

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 07:26:11 ON 30 SEP 2003